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Taxonomy & Inventories

Soil and leaf litter ants from the Amazon Region offer new distribution records for Colombia

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Abstract

Background

The Colombian Amazon is a region of remarkable biodiversity; however, several biological groups and their microhabitats remain poorly explored. Recent studies on soil ant diversity have provided new records and insights into their biology. Sampling techniques focused on exploring the soil interior (monoliths) and leaf litter have led to numerous new ant records for Colombia, as well as range expansions for many species previously known from other regions.

New information

Seven new species records are reported for the country and the distribution of 14 species is extended within the Department of Caquetá. These 21 records belong to five subfamilies and sixteen genera. For the first time, the genera *Lenomyrmex* (Fernández & Palacio), *Myrmelachista* (Roger), *Oxyepoecus* (Santschi) and *Stegomyrmex* (Emery) are

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recorded for the Colombian Amazon. Additionally, the first case of an ergatoid queen in *Probolomyrmex kelleri* (Oliveira & Feitosa) is documented. The northernmost records of *Adelomyrmex striatus* (Fernández) and *Centromyrmex gigas* (Forel) are also reported. Morphological observations, distribution data and images of all recorded species are included. The specimens were collected using the Tropical Soil Biology and Fertility (TSBF) and Winkler extraction methodologies. Furthermore, we present a checklist of ants from Caquetá, listing **321** species for the Department. Finally, we update the known ant diversity of Colombia, reporting a total of **1.280** species and **110** genera.

Keywords

Caquetá Department, distributional range, diversity, formicidae, morphology

Introduction

Colombia is a megadiverse country (Rodríguez-Zapata and Ruíz-Agudelo 2021). In fact, the number of species of birds, orchids and butterflies in Colombia is higher than in any other country in the world (Arbelaez-Cortes 2013). This high biodiversity is concentrated in three areas or hotspots: the Amazon, the Andes and the Chocó-Darién. These areas are home to a large number of endemic species, but are threatened by various human activities (e.g. mining, illicit crops, armed conflict), which have led to habitat degradation and transformation (Dávalos et al. 2016). These hotspots have received considerable attention in research on plants, vertebrates and certain charismatic insect groups, such as butterflies. However, the situation is different for ants, which have been studied systematically, but on a relatively smaller geographic scale (e.g. the Sierra Nevada de Santa Marta by Guerrero and Sarmiento (2010)). Different studies suggest that forests in the Colombian Amazon, the Andes and the Chocó-Darién show high species diversity and elevated levels of ant endemism (Guénard et al. 2012, Kass et al. 2022). Kass et al. (2022) estimated that various areas of Colombia should be systematically explored to better understand ant diversity and its potential use in conservation and biogeography studies. In this context, specific ecosystems such as the tropical dry forests found in the inter-Andean valleys, the eastern and Caribbean regions of Colombia (Pizano et al. 2014), as well as the Chocó-Darién moist forests, the Andean foothills, the Amazon rainforest and the transition zones connecting the Amazon to the Andes (i.e. the Andean-Amazonian transition, AATZ) should be prioritised in ant studies due to their potential to yield new records and species for Colombia.

The intermediate or transition zones, with variations in altitude, precipitation and topography, provide ideal conditions for harbouring many species (Ghazoul and Sheil 2010). In the Neotropics, this diversity of microclimates and microhabitats fosters the co-existence of a high diversity of ant species (Longino and Colwell 1997), primarily those living in the soil, both above and below ground. In this context, subterranean ants may represent the “final frontier” in the study of ant biodiversity, as soil is home to at least one-quarter of all extant ant species (MacKay and Vinson 1989, Belshaw and Bolton 1994,

Delabie and Fowler 1995, Yamaguchi and Hasegawa 1996, Fowler et al. 2000, Weissflog et al. 2000, Berghoff et al. 2003a, Berghoff et al. 2003b, Silva and Silvestre 2004, Ryder et al. 2007, Ryder et al. 2010a, Ryder et al. 2010b, Turbé et al. 2010). The soil ant community of the Colombian Andean-Amazonian transition has been poorly studied, although there are preliminary lists that include them (Castro et al. 2018), which suggest the Amazon transition zone is an area of unique species concentration (i.e. high species turnover). Despite the limited studies, the foothills of the Colombian Amazon have been identified as a refuge for the ground-dwelling ant community (Chacón de Ulloa and Abadía 2014). However, more data are needed to support this hypothesis and, thus, there is a need to significantly increase sampling efforts using combined methodologies to capture ants at different soil depths, including those that live in leaf litter as the Tropical Soil Biology and Fertility method works.

The Tropical Soil Biology and Fertility (TSBF) monolith method (Anderson and Ingram 1993) has enabled sampling across different soil strata, generating valuable information on ants with subterranean habits (Castro et al. 2018, Castro et al. 2023). Earlier studies in the Colombian Andean-Amazonian transition have yielded important records, such as the first record for northern South America of *Gracilidris pombero* Wild and Cuezzo, 2006 (Guerrero and Sanabria 2011), as well as four new records of ants for Colombia (Castro et al. 2018) and ecological information on army ants (Sanabria-Blandón and Achury 2011). These results suggest that the foothills of the Colombian Amazon could harbour a veritable treasure trove of ant species, many of which are still not fully documented (Fragoso et al. 2001, Hättenschwiler et al. 2005, Ryder et al. 2007). To contribute to the knowledge of soil and sub-soil ant diversity in an Andean-Amazonian transition zone (AATZ), we sampled ants from ground level (including leaf litter) to 30 cm below ground, using Winkler sacs and the TSBF monolith method. We present seven new ant records for Colombia and extend the distribution range of fourteen species previously known from other regions of the country. Additionally, we expand the distribution of three genera previously unknown for the Colombian Amazon region (e.g. *Stegomyrmex*). Information on the biology and distribution of some of the recorded species is provided. The results are compared with previous studies in both the transition zone and other areas of the Amazon rainforest.

Materials and methods

Ants were collected using the TSBF methodology (Anderson and Ingram 1993, ISO 2024), using a 25 × 25 × 30 cm (length, width and depth, respectively) soil block (including the surface stratum that was composed of leaf litter), which was divided into four strata (Fig. 1): leaf litter stratum was separated and processed with Winkler sacs (Bestelmeyer et al. 2000) and the depths 0-10 cm (= A), 10-20 cm (= B) and 20-30 cm (= C) which were checked in the field, extracting the ants by manual means. All ants recorded here were deposited at the Laboratory of Entomology of the University of Amazonia (LEUA), Florencia, Caquetá, Colombia.

Figure 1. doi

Methodology TSBF. **A** Introduction of the monolite into the soil by mechanical action; **B** Leaf litter removal for extraction with Winkler bags; **C** Organisation of the area for monolite extraction; **D** Extraction of the monolite; **E** Cleaning and organisation of the monolite **F** Stratification of the monolite where the deepest stratum (20-30 cm) was removed; **G** Manual revision of the superficial stratum (= A); **H** Manual revision of the stratum B.

Photomicrographs and SEM

High resolution images were generated with a Leica digital high-resolution camera (Type DFC450), attached to a LEICA M205 A automated stereomicroscope. Stacked images were processed with LAS montage module Leica®. SEM micrographs were made using the scanning electron microscope HITACHI Tabletop Microscope (TM4000Plus).

Taxonomic identification

Taxonomic revisions were used for the identification of the specimens. Additionally, comparisons were made with high-resolution images (AntWeb 2024) and original descriptions of the species (Emery 1890, Fernández 2003a, Albuquerque and Brandão 2004). The following taxonomic keys were used: *Wheeler (1911)* for *Mycetomoellerius*, *Albuquerque and Brandão (2004)* for *Oxyepoecus*, *Feitosa et al. (2008)* for *Lachnomyrmex*, Feitosa et al. (2008) for *Stegomyrmex*, *Delsinne and Fernández (2011)* for *Lenomyrmex*, Lattke (2011) for *Leptogenys*, Ortíz and Fernández (2011) for *Dolichoderus*, Longino (2012) for *Adelomyrmex*, *Fernández et al. (2014)* for *Kempfidris*, Franco and Feitosa (2018) for *Centromyrmex*, *Fernández and Guerrero (2019)* for

Thaumatomyrmex, *Oliveira and Feitosa (2019)* for *Probolomyrmex*, Pérez-Pedraza and Fernández (2019)for *Strumigenys*, Branstetter and Longino (2022) for *Wadeura*, and *Probst and Brandão (2022)* for *Basiceros*.

Specimen information and distribution maps

The information associated with each specimen was transcribed directly from its labels. The distribution maps were generated with Quantum GIS v.3.2. (QGIS Development Team 2024).

Taxon treatments

Dolichoderus debilis Emery, 1890

Materials

a. scientificName: *Dolichoderus debilis*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Dolichoderus*; specificEpithet: *debilis*; scientificNameAuthorship: Emery, 1890; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. San Luis, Fca. El Carmen 1; verbatimElevation: 433 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°40'34.2"N 75°37'39.2"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2022-12-20; individualCount: 1; sex: female; catalogNumber: LEUA-00000061181; recordedBy: Kenna Martinez; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 5756BD00-C458-5C94-86AD-E5527B198C60

b. scientificName: *Dolichoderus debilis*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Dolichoderus*; specificEpithet: *debilis*; scientificNameAuthorship: Emery, 1890; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. San Luis, Fca. El Carmen 1; verbatimElevation: 433 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°40'34.2"N 75°37'39.2"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2022-12-20; individualCount: 1; sex: female; catalogNumber: LEUA-00000061182; recordedBy: Kenna Martinez; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 1F001B36-5B17-50C0-96B1-BA7398D2ABA5

Diagnosis

This species can be recognised by the absence of erect hairs on the scapes (small white erect hairs may be present), the presence of spines on the anterolateral angles of the pronotum (humeral angles) and the spine or tooth-shaped apical projection on the dorsal surface of the petiolar node (Fig. 2).

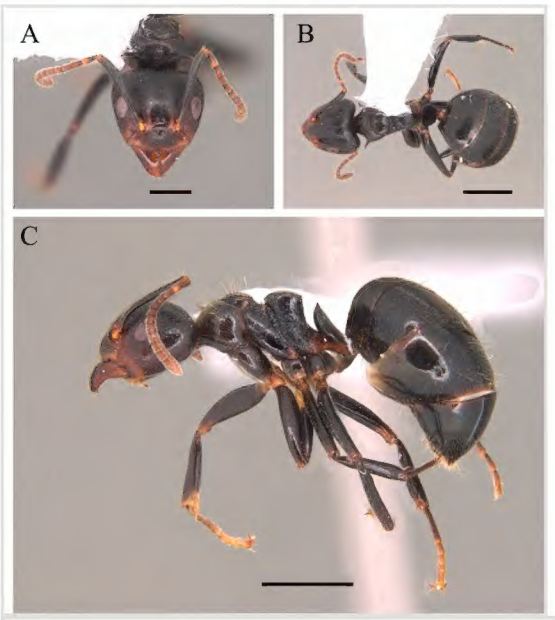

Figure 2. doi

Dolichoderus debilis worker (LEUA-00000061181) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 0.5 mm (A); 1.0 (B, C).

Distribution

Dolichoderus debilis has a Neotropical distribution. In Colombia, it has been recorded in the Departments of Antioquia, Bolívar, Guajira, Magdalena and Santander (Fernández et al. 2019), as well as in the Departments of Amazonas, Meta and Putumayo in the Amazon Region (Ortíz and Fernández 2011). It is reported here for the first time in the Department of Caquetá. In the Neotropical Region, the species has also been recorded in Bolivia, Brazil, Peru, Guyana, Suriname, French Guiana, Panama, Costa Rica, Guatemala and Mexico (Kempf 1959, Fernandez and Sendoya 2004).

Biology

The specimens were collected in an Andean Amazonian transition zone (Amazonian foothills) in the cloud forest. It has been recorded from the rainforest (Mackay 1993). Some observations suggest that *D. debilis* is associated with the ant genus *Crematogaster* and with termites of the genus *Nasutitermes* (Forel 1898, Wheeler 1936).

Dolichoderus rugosus (Smith, 1858)

Materials

a. scientificName: *Dolichoderus rugosus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Dolichoderus*; specificEpithet: *rugosus*; scientificNameAuthorship: (Smith, 1858); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Paz, Fca. El Mirador; verbatimElevation: 590 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°43'48.1"N 75°38'33.3"W; verbatimCoordinateSystem: WGS84;

samplingProtocol: Monolite / TSBF; eventDate: 2023-02-22; individualCount: 1; sex: female; catalogNumber: LEUA-00000061174; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: D3CDDED9-C277-59B2-9424-D334DFFC9313

b. scientificName: *Dolichoderus rugosus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Dolichoderus*; specificEpithet: *rugosus*; scientificNameAuthorship: (Smith, 1858); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Paz, Fca. El Mirador; verbatimElevation: 590 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°43'48.1"N 75°38'33.3"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-22; individualCount: 1; sex: female; catalogNumber: LEUA-00000061178; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 1E152BB3-7CF8-5F4B-85BD-641F83A095A4

Diagnosis

This species is one of the largest of the genus, recognised by the length of the maxillary palps which extend to the *foramen magnum*; furthermore, these ants have mesosoma extremely long and narrow, with the meso and metapleural longer than wide (Fig. 3).

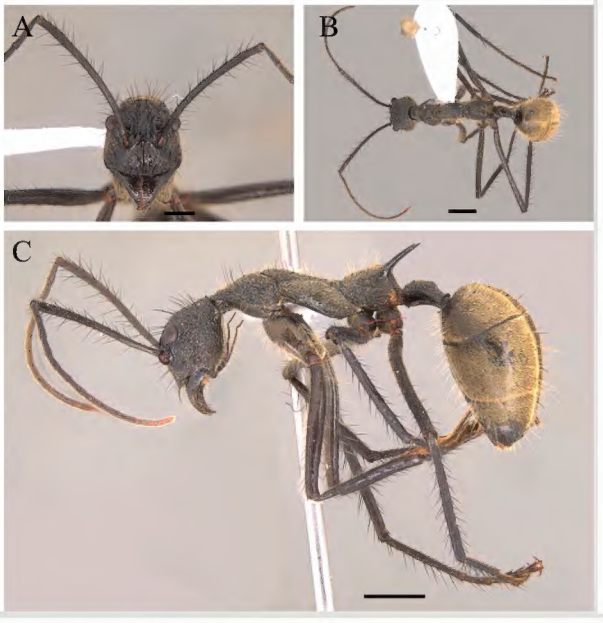

Figure 3. doi

Dolichoderus rugosus worker (LEUA-00000062446) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 1.0 mm (A); 2.0 (B, C).

Distribution

This species shows a Neotropical distribution with records only for South America, in the Amazon rainforest (Ortíz and Fernández 2011). It is reported here for the first time in the Department of Caquetá. In Colombia, it also has a record outside the Amazon Region, in the Department of Antioquia (Ortíz and Fernández 2011). In the

Neotropical Region, the species has also been recorded in Bolivia, Brazil, Ecuador, Peru, Guyana, Suriname and French Guiana (Kempf 1969, Fernandez and Sendoya 2004).

Biology

Specimens record here were found in the leaf litter in the Rio Hacha Basin, being the predominant ant species in this highly conserved area (Andean-Amazonian transition zone in the Department of Caquetá).

Myrmelachista schumanni Emery, 1890

Material

a. scientificName: *Myrmelachista schumanni*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Myrmelachista*; specificEpithet: *schumanni*; scientificNameAuthorship: Emery, 1890; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vía Florencia-Guadalupe; verbatimElevation: 923 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°46'29.8"N 75°39'9.5"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Winkler; eventDate: 2023-08-12; individualCount: 1; sex: female; catalogNumber: LEUA-00000066482; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 5B1742BA-8699-5FE1-8D1B-472D1F07DD61

Diagnosis

The genus *Myrmelachista* is recognised by its five-toothed mandible, 9 or 10 segmented antennae, with a 3 or 4 segmented antennal club and a wedge-shaped, erect, prominent and exposed petiole (Fig. 4).

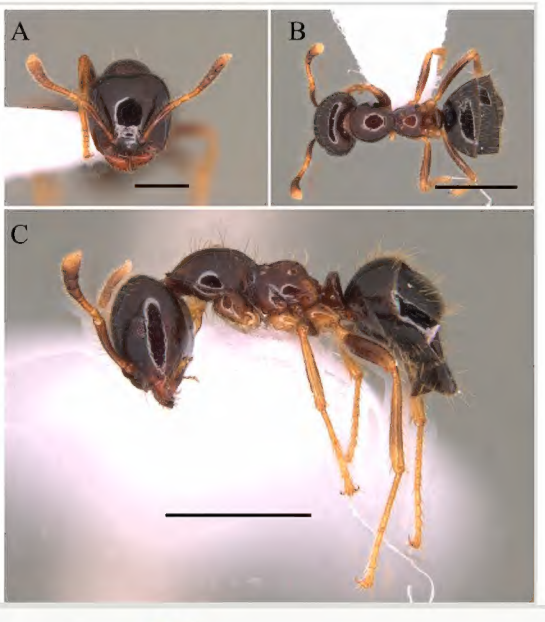

Figure 4. doi

Myrmelachista schumanni worker (LEUA-00000066482) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 0.5 mm (A); 1.0 (B, C).

Distribution

Information on this species is scarce. In Colombia, it was known to be present, but without specific locality data (Fernández et al. 2019). It is reported here for the first time in the Department of Caquetá, in the Colombian Amazon Region. In the Neotropical Region, the species has also been recorded in Ecuador, Peru, Guyana and Venezuela (Kusnezov 1953, Frederickson 2005a, Salazar et al. 2015).

Biology

M. schumanni is recognised for its specific relationship with some plant species, forming the so-called Devil's gardens. This mutualistic interaction has been the subject of several studies (Frederickson et al. 2005, Frederickson 2005a, Frederickson 2005b, Frederickson and Gordon 2007), demonstrating the impact of this relationship in tropical rainforests. The collected specimen was sampled by leaf-litter sifting in a preserved area from a cloud forest. The presence of this species in leaf litter can be incidental due to the species' foraging behaviour on vegetation, which can result in its falling to the forest floor.

Adelomyrmex striatus Fernández, 2003

Materials

a. scientificName: *Adelomyrmex striatus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Adelomyrmex*; specificEpithet: *striatus*; scientificNameAuthorship: Fernández, 2003; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. La Fortaleza; verbatimElevation: 1266 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°48'22.1"N 75°39'12.7"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Winkler; eventDate: 2023-08-12; individualCount: 1; sex: female; catalogNumber: LEUA-00000066483; recordedBy: Fernando Celis; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 6EE48905-53B7-560D-B507-09E3E930A680

b. scientificName: *Adelomyrmex striatus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Adelomyrmex*; specificEpithet: *striatus*; scientificNameAuthorship: Fernández, 2003; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. La Fortaleza; verbatimElevation: 1266 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°48'22.1"N 75°39'12.7"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Winkler; eventDate: 2023-08-12; individualCount: 1; sex: female; catalogNumber: LEUA-00000066484; recordedBy: Fernando Celis; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 82AA0EC0-0A98-54BF-BA65-13AEBD3A82B4

c. scientificName: *Adelomyrmex striatus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Adelomyrmex*; specificEpithet: *striatus*; scientificNameAuthorship: Fernández, 2003; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda.

Sucre, Fca. La Fortaleza; verbatimElevation: 1266 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°48'22.1"N 75°39'12.7"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Winkler; eventDate: 2023-08-12; individualCount: 1; sex: female; catalogNumber: LEUA-00000066485; recordedBy: Fernando Celis; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: B955E2A6-628A-5E83-B5B6-17CD517F32A4

d. scientificName: *Adelomyrmex striatus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Adelomyrmex*; specificEpithet: *striatus*; scientificNameAuthorship: Fernández, 2003; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Av.Caraño, Vía Florencia-Suaza; verbatimElevation: 1523 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°43'10.7"N 75°43'10.5"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Winkler; eventDate: 2023-09-30; individualCount: 1; sex: female; catalogNumber: LEUA-00000066486; recordedBy: Yenifer Gutierrez; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 71FE94C8-DD46-58AF-B344-15BA8BD19B3E

Diagnosis

This species is easily distinguished by sharp spiniform teeth on the median clypeal lobe and regular longitudinal striate sculpture on the head, pronotum, mesonotum, sides of mesosoma and petiole (Fig. 5).

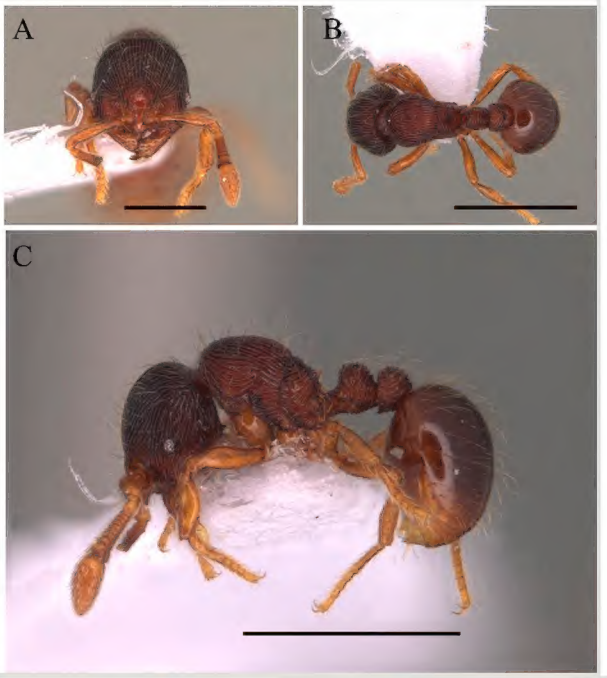

Figure 5. doi

Adelomyrmex striatus worker (LEUA-00000066483) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 0.5 mm (A); 1.0 mm (B, C).

Distribution

This record in the Andean-Amazonian transition zone of the Department of Caquetá represents the second record of the species in Colombia, suggesting a possible

distributional restriction for the Amazon rainforest (Guerrero et al. 2018). In the Neotropical Region, the species has also been recorded in Ecuador, Peru and Brazil (Longino 2012).

Biology

Slow-moving ants difficult to distinguish from the substrate. All specimens were extracted from sifted leaf litter from the humid forest above 1200 m in the Andean-Amazonian transition zone studied.

Notes

The Colombian specimen presents yellowish, long and flexuous hairs on the body, but shorter than in the populations from Manaus (Amazonas, Brazil). A population from Peru presents variation in the teeth of the medial clypeal lobe, as well as finer sculpting in the frontal area of the head (Longino 2012).

Basiceros conjugans Brown, 1974

Material

a. scientificName: *Basiceros conjugans*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Basiceros*; specificEpithet: *conjugans*; scientificNameAuthorship: Brown, 1974; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Paz, Fca. El Jardín; verbatimElevation: 640 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°43'39.7"N 75°37'11.5"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-20; individualCount: 1; sex: female; catalogNumber: LEUA-00000061876; recordedBy: Kenna Martinez; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 3B19C356-7EE5-5CC2-A416-A90295DCA2B1

Diagnosis

This species is recognised within the genus *Basiceros* Schulz, 1906 by the following characteristics: head almost as broad as long, occipital lobes rounded with the relatively straight with a narrow mesal concavity, without presence of continuous crest; petiolar node and postpetiole completely covered with dense pilosity; petiolar node well developed and, in dorsal view, sub-rectangular; petiole with ventral carina with many developed teeth, of different shapes; first gastral tergite with few specialised hairs on its most posterior margin, those longer than basilar pilosity (Fig. 6).

Distribution

This species has few records in the country, limited to the Departments of Amazonas, Meta and Nariño (Probst and Brandão 2022). It is recorded here for the first time in

the Department of Caquetá. In the Neotropical Region, the species has also been recorded in Ecuador, Peru and Brazil (Probst and Brandão 2022).

Figure 6. doi

Basiceros conjugans worker (LEUA-00000061876) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 1.0 mm (A, B, C).

Biology

This species was collected in leaf litter in the Río Hacha Basin. Additionally, it was collected on a log in leaf litter in cloud forest, although only one worker was observed. Probst and Brandão (2022) suggest that *B. conjugans* feeds on dead arthropods. Furthermore, it is thought that they may prey on termites, a behaviour observed in other species of the genus.

Basiceros disciger (Mayr, 1887)

Material

a. scientificName: *Basiceros disciger*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Basiceros* ; specificEpithet: *disciger*; scientificNameAuthorship: (Mayr, 1887); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. Carlos Endo; verbatimElevation: 1018 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°47'33.8"N 75°39'01.3"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Winkler; eventDate: 2023-02-09; individualCount: 1; sex: female; catalogNumber: LEUA-00000066499; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 19B846E0-CFAC-5490-B216-E3D819CC71FD

Diagnosis

This species is recognised within the genus *Basiceros* by the following characteristics: rounded occipital margin forming a continuous elevated crest, posterior crest of the vertex emarginate medially which meets the medial convexity of the vertex (Fig. 7).

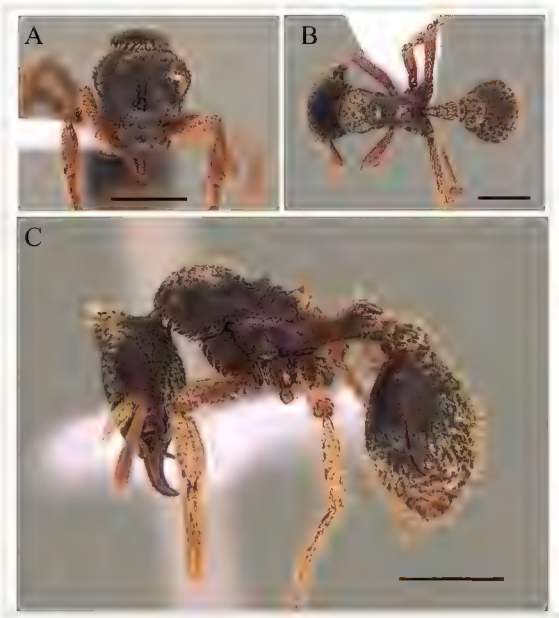

Figure 7. doi

Basiceros disciger worker (LEUA-00000066499) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 1.0 mm (A, B, C).

Distribution

This species is rarely collected. In Colombia, it has been recorded in the Departments of Meta and Norte de Santander (Probst and Brandão 2022). It is reported here for the first time in the Department of Caquetá. In the Neotropical Region, the species has also been recorded in Argentina, Brazil, Ecuador, Paraguay, Peru and Venezuela (Probst and Brandão 2022).

Biology

B. disciger is a common species in leaf-litter samples and widely distributed. A distinctive characteristic of this species is it presence in both highly conserved and degraded areas, unlike other species of the genus (Probst and Brandão 2022).

Basiceros scambognathus (Brown, 1949)

Materials

a. scientificName: *Basiceros scambognathus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Basiceros*; specificEpithet: *scambognathus*; scientificNameAuthorship: (Brown, 1949); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Universidad de la Amazonia, sede centro; verbatimElevation: 249 m; locationRemarks:

Collected in leaf Litter; verbatimCoordinates: 01°36'20"N 75°36'17"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Winkler; eventDate: 2023-08-18; individualCount: 1; sex: female; catalogNumber: LEUA-00000066497; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 06C73F41-B04B-59CF-96CB-514B60B5F3F5

b. scientificName: *Basiceros scambognathus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Basiceros*; specificEpithet: *scambognathus*; scientificNameAuthorship: (Brown, 1949); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Universidad de la Amazonia, sede centro; verbatimElevation: 249 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°36'20"N 75°36'17"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Winkler; eventDate: 2023-08-18; individualCount: 1; sex: female; catalogNumber: LEUA-00000066498; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: D7E977A5-D3AD-5CEB-AA07-2E0ABA414D91

Diagnosis

This species is recognised within the genus *Basiceros* by the following characteristics: occipital margin strongly emarginate generating two occipital lobes, mandible subtriangular, strongly bent ventrally, outer edges straight basally; mesoanapisternum strongly depressed (Fig. 8).

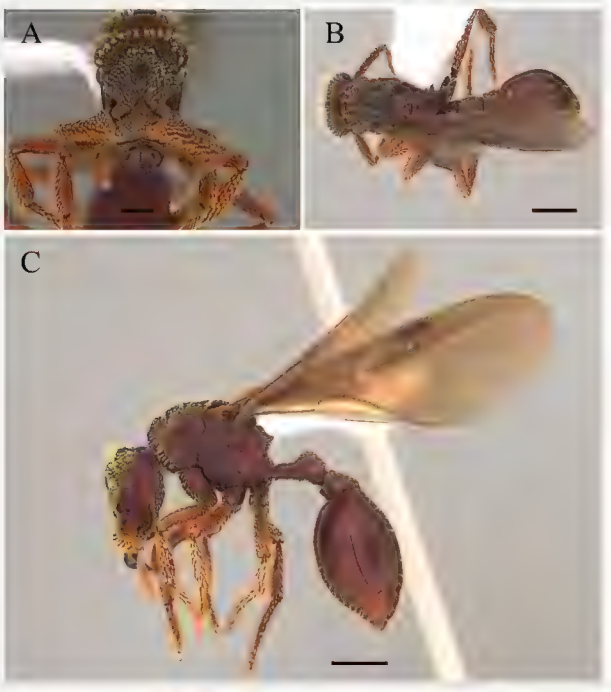

Figure 8. doi

Basiceros scambognathus queen (LEUA-00000066497) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 1.0 mm (A, B, C).

Distribution

This species was previously recorded in the Department of Amazonas (Fernández and Palacio 1995). It is reported here for the first time in the Department of Caquetá.

In the Neotropical Region, the species has also been recorded in Brazil, Peru and Venezuela (Probst and Brandão 2022).

Biology

According to Probst and Brandão (2022), the unusual morphology of the mandibles of the species suggests specific predation conditions. However, records on its biology are limited to those obtained by Feitosa et al. (2007); a queen was observed preying on termites under artificial conditions.

Kempfidris inusualis (Fernández, 2007)

Material

a. scientificName: *Kempfidris inusualis*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Kempfidris*; specificEpithet: *inusualis*; scientificNameAuthorship: (Fernández, 2007); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Viciosa, CIMAZ Macagual; verbatimElevation: 320 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°29'46"N 75°39'19"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-09-12; individualCount: 1; sex: female; catalogNumber: LEUA-00000066487; recordedBy: Luz Albenis Villaquiran; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: BB3475BB-75C4-5FB1-8CC0-7F54063948B8

Diagnosis

The genus and species can be distinguished from any other Myrmicine ant by a posteromedian portion of abdominal tergum VI and anteromedian portion of abdominal tergum VII with several minute, cylindrical micro-pegs, each bearing a hair on apex (Fig. 9) (Fernández et al. 2014).

Distribution

Kempfidris inusualis is a Neotropical species restricted to the Amazon rainforest. In Colombia, it is only known from the Department of Amazonas (Castro et al. 2018). It is reported here for the first time in the Department of Caquetá. In the Neotropical Region, the species has also been recorded in Ecuador, Peru, Brazil and Venezuela (Fernández et al. 2014, Camacho and Feitosa 2016).

Biology

This species was collected in the leaf litter in secondary forest near a fallen log in an Andean-Amazonian transition zone in the foothills of Amazonia.

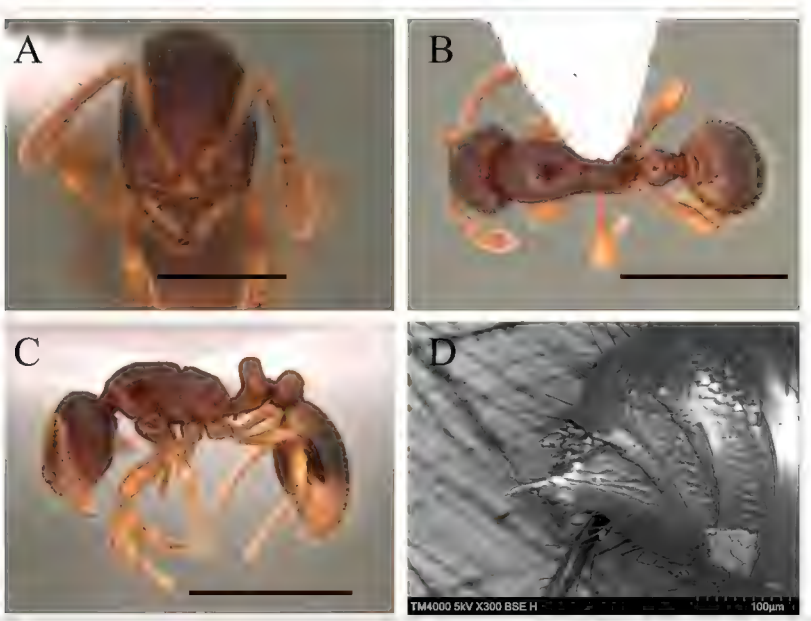

Figure 9. doi

Kempfidris inusualis worker (LEUA-00000066487) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view; **D** Electron microscopy of micro-cylindrical pins. Scale bars: 0.5 mm (A); 1.0 (B, C).

Notes

Fernández (2007) mentions that the morphological variability of the species is low, finding a variation in colouration, with more than one difference in the dorsal face of the propodeum and in the propodeal ridges, attributing this variation to the geographical distribution of the species.

Lachnomyrmex pilosus (Weber, 1950)

Materials

a. scientificName: *Lachnomyrmex pilosus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Lachnomyrmex*; specificEpithet: *pilosus*; scientificNameAuthorship: (Weber, 1950); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. La Fortaleza; verbatimElevation: 1266 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°48'22.1"N 75°39'12.7"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Winkler; eventDate: 2023-08-12; individualCount: 1; sex: female; catalogNumber: LEUA-00000066489; recordedBy: Fernando Celis; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: BBDB39C8-D45C-573F-B971-66C47CB996AE

b. scientificName: *Lachnomyrmex pilosus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Lachnomyrmex*; specificEpithet: *pilosus*; scientificNameAuthorship: (Weber, 1950); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. La Fortaleza; verbatimElevation: 1266 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°48'22.1"N 75°39'12.7"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Winkler; eventDate: 2023-08-12; individualCount: 1; sex: female; catalogNumber: LEUA-00000066490; recordedBy: Fernando Celis; language:

es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 2E423463-C27D-5D18-9517-C51E6789FAB1

c. scientificName: *Lachnomyrmex pilosus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Lachnomyrmex*; specificEpithet: *pilosus*; scientificNameAuthorship: (Weber, 1950); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Av.Caraño, Vía Florencia-Suaza; verbatimElevation: 1579 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°43'24.4"N 75°43'10"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Winkler; eventDate: 2023-09-30; individualCount: 1; sex: female; catalogNumber: LEUA-00000066488; recordedBy: Yenifer Gutierrez; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: C7D8443B-C1D1-5884-9010-081D0C6F5090

Diagnosis

This uncommon species is recognised by the following characteristics: inner surface of antennal scrobes and first gastral tergum smooth and shiny; body covered by long, flexible hairs; mesosoma covered fine, short striation; in lateral view, promesonotum strongly convex, superior to level of propodeum; propodeal spines less than twice as long as distance between their bases. The specimens collected in the eastern Amazon Basin are smaller than the Brazilian populations (Fig. 10) (Feitosa and Brandão 2008).

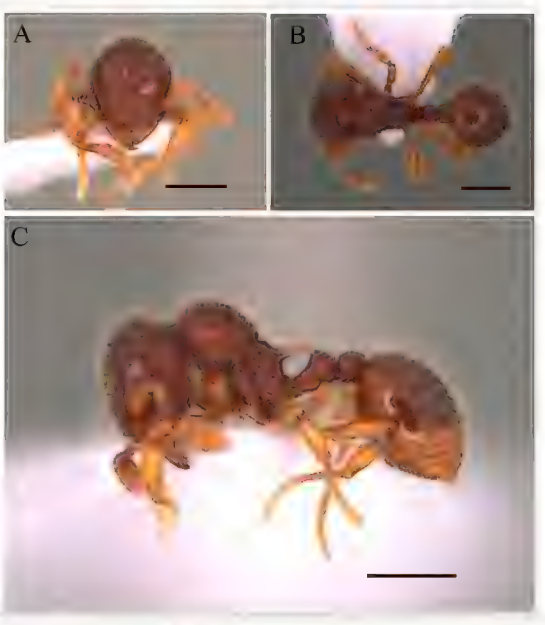

Figure 10. doi

Lachnomyrmex pilosus worker (LEUA-00000066488) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 0.5 mm (A, B, C).

Distribution

This is a Neotropical species reported from Brazil, Ecuador, Peru and Venezuela and is little known in Colombia with records from Amazonas, Meta and Nariño (Feitosa and Brandão 2008). It is reported here for the first time in the Department of Caquetá.

Biology

Species common in the leaf litter of humid forests, distributed from 200 to 1400 m elev.

Lenomyrmex inusitatus (Fernández, 2001)

Material

a. scientificName: *Lenomyrmex inusitatus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Lenomyrmex*; specificEpithet: *inusitatus*; scientificNameAuthorship: (Fernández, 2001); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Av.Caraño, Vía Florencia-Suaza; verbatimElevation: 1375 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°42'34.3"N 75°43'5.9"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Winkler; eventDate: 2023-09-30; individualCount: 1; sex: female; catalogNumber: LEUA-00000066496; recordedBy: Yenifer Gutierrez; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: C6C8D14D-651B-577D-990C-B7F436758C3D

Diagnosis

This species can be recognised by its mesosoma smooth and shiny, with no erect hairs; propodeum with a pair of acute and well-defined spines; head foveolate, with median longitudinal striae (Fig. 11) (Fernández and Serna 2019).

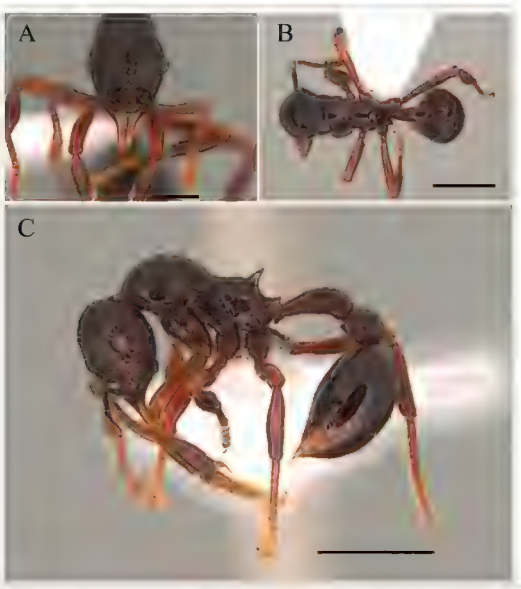

Figure 11. doi

Lenomyrmex inusitatus worker (LEUA-00000066496) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 0.5 mm (A); 1.0 (B, C).

Distribution

This is the first record of the genus and species for the Amazon Region. The species was previously known from southern Colombia (Delsinne and Fernández 2011) and

Ecuador (Salazar et al. 2015). This finding highlights the importance of studying ants in transition zones, as valuable information can be obtained about the distribution of species considered primarily Andean.

Biology

Unusual species, rarely collected. According to Delsinne and Fernández (2011), *L. inusitatus* inhabits mainly leaf litter and modified mandibles may be related to their being specialised hunter ants, although their prey is not known.

Mycetomoellerius farinosus (Emery, 1894)

Materials

a. scientificName: *Mycetomoellerius farinosus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Mycetomoellerius*; specificEpithet: *farinosus*; scientificNameAuthorship: (Emery, 1894); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Villaraz, Fca. El Triunfo; verbatimElevation: 806 m; locationRemarks: From 0 cm to 10 cm deep in the ground; verbatimCoordinates: 01°43'18.3"N 75°40'06.5"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000061931; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 45CD220C-00A3-5480-ACA4-3AF8CD70C8E0

b. scientificName: *Mycetomoellerius farinosus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Mycetomoellerius*; specificEpithet: *farinosus*; scientificNameAuthorship: (Emery, 1894); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Villaraz, Fca. El Triunfo; verbatimElevation: 806 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°43'18.3"N 75°40'06.5"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000061965; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 20A1D378-29BA-5ACA-A802-FD17DED0D453

c. scientificName: *Mycetomoellerius farinosus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Mycetomoellerius*; specificEpithet: *farinosus*; scientificNameAuthorship: (Emery, 1894); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Villaraz, Fca. El Triunfo; verbatimElevation: 806 m; locationRemarks: From 20 cm to 30 cm deep in the ground; verbatimCoordinates: 01°43'18.3"N 75°40'06.5"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000061972; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 83673E1E-C0EA-5E46-B69F-992AEE4E4919

d. scientificName: *Mycetomoellerius farinosus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Mycetomoellerius*; specificEpithet: *farinosus*; scientificNameAuthorship: (Emery, 1894); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Villaraz, Fca. El Triunfo; verbatimElevation: 806 m; locationRemarks: From 20 cm to 30 cm deep in the ground; verbatimCoordinates: 01°43'18.3"N 75°40'06.5"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000061973; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 40C151DA-F972-577D-A956-D9AD55EF32BD

e. scientificName: *Mycetomoellerius farinosus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Mycetomoellerius*; specificEpithet: *farinosus*; scientificNameAuthorship: (Emery, 1894); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Villaraz, Fca. El Triunfo; verbatimElevation: 806 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°43'18.3"N 75°40'06.5"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000061980; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 45D4F552-CA7E-547B-AD68-82CF10AEA6EA

f. scientificName: *Mycetomoellerius farinosus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Mycetomoellerius*; specificEpithet: *farinosus*; scientificNameAuthorship: (Emery, 1894); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Villaraz, Fca. El Triunfo; verbatimElevation: 806 m; locationRemarks: From 10 cm to 20 cm deep in the ground; verbatimCoordinates: 01°43'18.3"N 75°40'06.5"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000062142; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 3979AAE2-8CC2-5D33-B0E1-EB151C2388FD

g. scientificName: *Mycetomoellerius farinosus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Mycetomoellerius*; specificEpithet: *farinosus*; scientificNameAuthorship: (Emery, 1894); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Villaraz, Fca. El Triunfo; verbatimElevation: 806 m; locationRemarks: From 10 cm to 20 cm deep in the ground; verbatimCoordinates: 01°43'18.3"N 75°40'06.5"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000062143; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 72E7280F-501C-5502-B7B9-868028082309

h. scientificName: *Mycetomoellerius farinosus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Mycetomoellerius*; specificEpithet: *farinosus*; scientificNameAuthorship: (Emery, 1894); continent: South

America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Villaraz, Fca. El Triunfo; verbatimElevation: 806 m; locationRemarks: From 10 cm to 20 cm deep in the ground; verbatimCoordinates: 01°43'18.3"N 75°40'06.5"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000062144; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: E1E84BFE-4823-590C-B182-FC1AA6277E4B

i. scientificName: *Mycetomoellerius farinosus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Mycetomoellerius*; specificEpithet: *farinosus*; scientificNameAuthorship: (Emery, 1894); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Villaraz, Fca. El Triunfo; verbatimElevation: 806 m; locationRemarks: From 10 cm to 20 cm deep in the ground; verbatimCoordinates: 01°43'18.3"N 75°40'06.5"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000062145; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 11BCAA12-5675-5A07-BDC8-F0E281D3217C

Diagnosis

This species is known for having the first gastral tergite depressed above, compressed on the sides, sub-truncated and gibbous behind and body covered with white scales along the hooked hairs (Fig. 12).

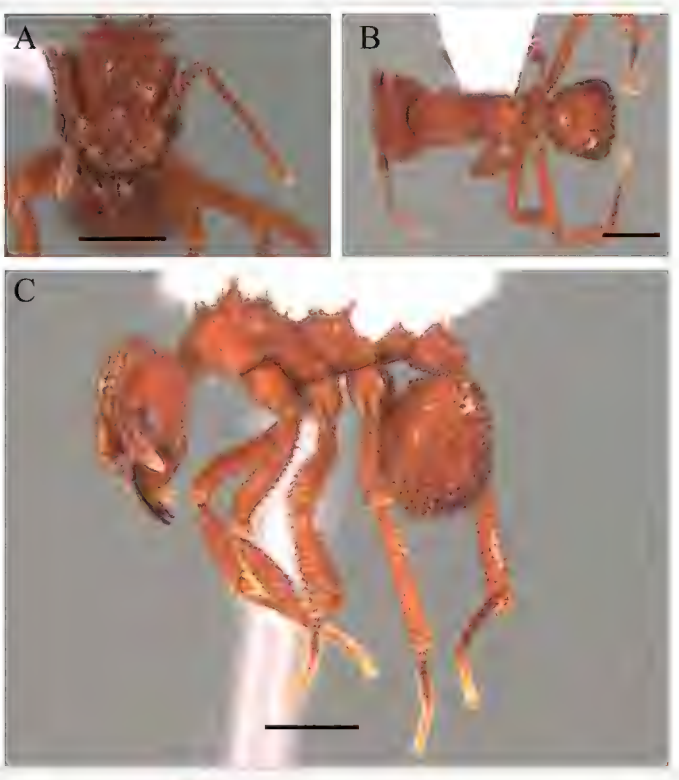

Figure 12. doi

Mycetomoellerius farinosus worker (LEUA-00000061972) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 1.0 mm (A, B, C).

Distribution

Mycetomoellerius farinosus is a Neotropical species distributed in the Amazon rainforest (Ryder et al. 2010b). This is the first record of the species in Colombia. In the Neotropical Region, the species has also been recorded in Brazil, Ecuador, Peru, Guyana, Suriname, French Guiana and Venezuela (Mayhe-Nunes and Jaffe 1998, Silva et al. 2004, Youngsteadt et al. 2009)

Biology

Mycetomoellerius farinosus is a species commonly present in leaf litter in the Andean-Amazonian transition zone of the Hacha River Basin (Caquetá).

Oxyepoecus ephippiatus Albuquerque & Brandão, 2004

Material

a. scientificName: *Oxyepoecus ephippiatus*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Oxyepoecus* ; specificEpithet: *ephippiatus*; scientificNameAuthorship: Albuquerque & Brandão, 2004; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. San Luis, Fca. El Carmen 1; verbatimElevation: 433 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°40'34.2"N 75°37'39.2"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2022-12-20; individualCount: 1; sex: female; catalogNumber: LEUA-00000066491; recordedBy: Kenna Martinez; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 68EE000B-4A46-5F36-9032-80084D733F2D

Diagnosis

This species is recognised by the following characteristics: dorsum of mesosoma smooth and shiny, irregularly reticulate sculpture absent; length of head not clearly greater than width; pronotum convex and rounded above, propodeum and metapleuron with well-marked costulae; propodeum saddle-shaped; posterior border of the katepisternum and posterior face of the postpetiole smooth and shining; petiole anteroposteriorly compressed, scale-like (Fig. 13) (Albuquerque and Brandão 2004).

Distribution

This species is rarely collected, with only a few records from the Amazon rainforest (Albuquerque and Brandão 2004). This is the first report of the species in Colombia and the second report of the genus in the country, which was previously known from only a single record in the Department of Meta. In the Neotropical Region, the species has also been recorded in Brazil, Ecuador and French Guiana (Albuquerque and Brandão 2004, Salazar et al. 2015, Franco et al. 2019).

Figure 13. doi

Oxyepoecus ephippiatus worker (LEUA-00000066491) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 0.5 mm (A); 1.0 (B, C).

Biology

The only specimen of *Oxyepoecus ephippiatus* was collected in leaf litter in the Andean-Amazonian transition zone, in the lower cloud forest of the Hacha River Basin.

Stegomyrmex manni Smith, 1946

Material

a. scientificName: *Stegomyrmex manni*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Stegomyrmex*; specificEpithet: *manni*; scientificNameAuthorship: Smith, 1946; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. El Quindío, Fca. La Esperanza; verbatimElevation: 556 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°42'23.9"N 75°38'40.0"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-05-09; individualCount: 1; sex: female; catalogNumber: LEUA-00000066492; recordedBy: Kenna Martinez; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: D985C1CE-1A4C-5664-A67E-69FCF2D58527

Diagnosis

This species is recognised by the following characteristics: Head subtrapezoidal with angulated occipital corners; frontal lobes markedly expanded laterally and anteriorly, projecting over the clypeus and part of the mandibles; antennal scrobes deep, completely covered by lateral expansions of frontal lobes; promesonotum continuously rounded in profile; metanotal groove wide and shallow; propodeal

spines short and acute; tegument hard with sculpture and coarse pilosity (Feitosa et al. 2008) (Fig. 14).

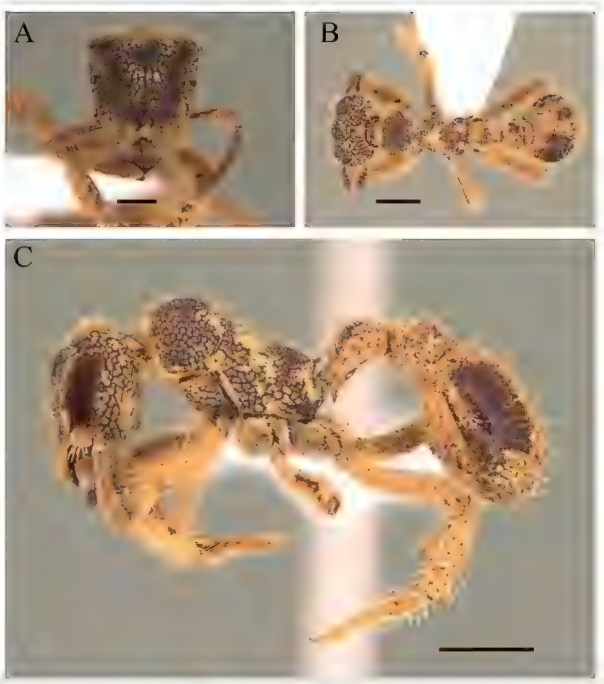

Figure 14. doi

Stegomyrmex manni worker (LEUA-00000066492) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 0.5 mm (A); 1.0 mm (B, C).

Distribution

Stegomyrmex manni is a Neotropical species widely distributed in Mesoamerica, but with scarce records in South America (Feitosa et al. 2008). This is the first report of the species in Caquetá and the second report of this species in the country (Serna 2002), marking the first record of the species for the Amazon rainforest region. In the Neotropical Region, the species has also been recorded in Ecuador, French Guiana, Honduras, Nicaragua, Costa Rica and Panama (Smith 1946, Kempf 1972, Ryder et al. 2010b, Franco et al. 2019).

Biology

The specimen was collected using the TSBF methodology, between 0 and 10 cm depth, which would suggest that this species inhabits the soil. This record complements the observations made by Feitosa et al. (2008), where they mentioned that *S. manni* is a soil inhabitant and is collected infrequently using Winkler bags. Here, we report, for the first time, the hypogeic habits in this species.

Strumigenys incuba Bolton, 2000

Materials

a. scientificName: *Strumigenys incuba*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Strumigenys*; specificEpithet: *incuba*; scientificNameAuthorship: Bolton, 2000; continent: South America; country:

Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Av. Caraño, Fca. El Chorro; verbatimElevation: 739 m; locationRemarks: From 0 cm to 10 cm deep in the ground; verbatimCoordinates: 01°44'27.2"N 75°39'12.3"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2022-12-08; individualCount: 1; sex: female; catalogNumber: LEUA-00000061667; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 037519A0-93C4-5100-BF63-DC459E0C0886

b. scientificName: *Strumigenys incuba*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Strumigenys*; specificEpithet: *incuba*; scientificNameAuthorship: Bolton, 2000; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Av. Caraño, Fca. El Chorro; verbatimElevation: 739 m; locationRemarks: From 0 cm to 10 cm deep in the ground; verbatimCoordinates: 01°44'27.2"N 75°39'12.3"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2022-12-08; individualCount: 1; sex: female; catalogNumber: LEUA-00000061668; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: C06EDC30-76A7-525C-A8EE-F601C7277272

c. scientificName: *Strumigenys incuba*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Strumigenys*; specificEpithet: *incuba*; scientificNameAuthorship: Bolton, 2000; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Av. Caraño, Fca. El Chorro; verbatimElevation: 739 m; locationRemarks: From 0 cm to 10 cm deep in the ground; verbatimCoordinates: 01°44'27.2"N 75°39'12.3"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2022-12-08; individualCount: 1; sex: female; catalogNumber: LEUA-00000061669; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: BA418CB0-F8F8-56FB-BDDC-4F2B7EF2C128

Diagnosis

This species is recognised by having a mandible located in the middle of the anterior margin of the clypeus, without intercalary teeth, with a single proximal pre-apical tooth located near the mid-length; propodeal declivity with a narrow carina; a disc of the postpetiole and dorsum of first gastral tergite partially smooth with the presence of the basigastral carina; hairs of the first gastral tergite rigid; dorsum of the pronotum strongly rugose longitudinally; metapleural and lateral region of the propodeum smooth (Fig. 15).

Distribution

This species has a restricted distribution, being recorded only from Ecuador and Colombia (Ryder et al. 2010b). In Colombia, it is known from the Departments of Cauca and Putumayo (Fernández et al. 2019). It is reported here for the first time in the Department of Caquetá.

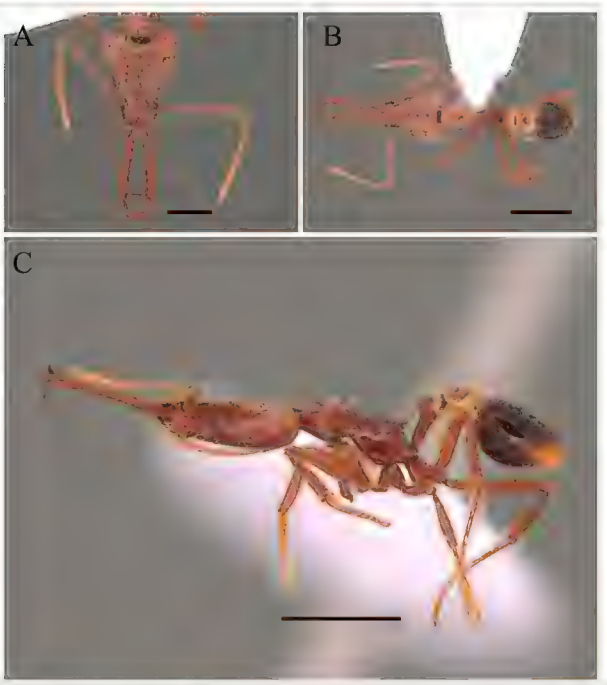

Figure 15. doi

Strumigenys incuba worker (LEUA-00000062105) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 0.5 mm (A); 1.0 mm (B, C).

Biology

The specimens were collected 0 to 10 cm deep in the soil in an Andean-Amazonian transition zone.

Strumigenys prospiciens Emery, 1906

Material

a. scientificName: *Strumigenys prospiciens*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Strumigenys* ; specificEpithet: *prospiciens*; scientificNameAuthorship: Emery, 1906; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Av. Caraño, Fca. Buenos Aires 1; verbatimElevation: 1095 m; locationRemarks: From 0 cm to 10 cm deep in the ground; verbatimCoordinates: 01°44'06.6"N 75°40'24.6"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-06-01; individualCount: 1; sex: female; catalogNumber: LEUA-00000062105; recordedBy: Kenna Martinez; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: A2501D90-71C9-550A-9BAE-6F3B560DF9B6

Diagnosis

This species is recognised by the following characteristics: in frontal view, mandibles arising from the middle of the anterior margin of the clypeus; cephalic dorsum with a single pair of erect hairs, located posteromedially; Mesosoma in profile, propodeal declivity concave, upper and lower propodeal teeth narrowly proximal, joined by a short, broad lamella; bulla of femoral gland located dorsally in apical quarter of segment length, usually with faint oval patch-like appearance; first gastral tergite with

numerous flagellate, suberect to erect hairs arising over entire tergite (Fig. 16) (Emery 1906, Bolton 2000).

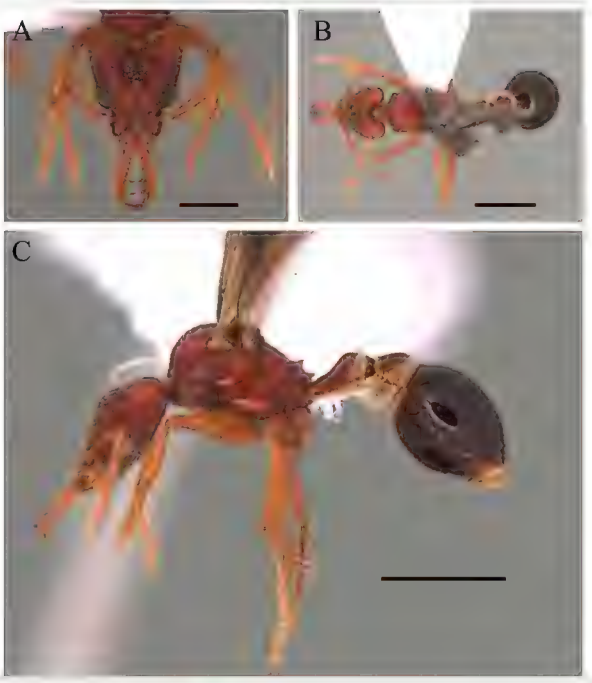

Figure 16. doi

Strumigenys prospiciens queen (LEUA-00000062105) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 0.5 mm (A); 1.0 mm (B, C).

Distribution

Strumigenys prospiciens is widely distributed in South America (Bolton 2000). It is reported here for the first time in Colombia. In the Neotropical Region, the species has also been recorded in Brazil, Bolivia, Ecuador, Peru, Paraguay, French Guiana and Venezuela (Lattke and Goitía 1997, Bolton 2000, Wild 2007).

Biology

The queen was collected 0 to 10 cm deep in the soil in an Andean-Amazonian transition zone, using TSBF sampling methodology.

Centromyrmex gigas Forel, 1911

Materials

a. scientificName: *Centromyrmex gigas*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Centromyrmex*; specificEpithet: *gigas*; scientificNameAuthorship: Forel, 1911; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Av. Caraño, Fca. La Esperanza; verbatimElevation: 604 m; locationRemarks: From 10 cm to 20 cm deep in the ground; verbatimCoordinates: 01°43'45.2"N 75°38'57.2"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-22; individualCount: 1; sex: female; catalogNumber: LEUA-00000061955; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode:

Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: BE32A364-4DC5-566E-9014-024D0601658C

b. scientificName: *Centromyrmex gigas*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Centromyrmex*; specificEpithet: *gigas*; scientificNameAuthorship: Forel, 1911; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Av. Caraño, Fca. La Esperanza; verbatimElevation: 604 m; locationRemarks: From 10 cm to 20 cm deep in the ground; verbatimCoordinates: 01°43'45.2"N 75°38'57.2"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-22; individualCount: 1; sex: female; catalogNumber: LEUA-00000061956; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: A7562812-544D-55F5-883E-46ED36B479B2

c. scientificName: *Centromyrmex gigas*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Centromyrmex*; specificEpithet: *gigas*; scientificNameAuthorship: Forel, 1911; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Av. Caraño, Fca. La Esperanza; verbatimElevation: 604 m; locationRemarks: From 10 cm to 20 cm deep in the ground; verbatimCoordinates: 01°43'45.2"N 75°38'57.2"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-22; individualCount: 1; sex: female; catalogNumber: LEUA-00000061957; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 602014AE-F9A7-58B6-A9AE-660AC2DC431E

Diagnosis

This species is recognised by being one of the largest of the genus with clypeus without a disc mound; basal third of mandible serrated, masticatory margin of mandible forming an obtuse angle with its basal margin; petiole distinctly longer than wide, anterior face perpendicular to dorsal face of petiolar node, which is an elongate and straight petiole with a prominent subpetiolar process apically rounded to subtruncate (Fig. 17) (Forel 1911, Franco and Feitosa 2018).

Distribution

This is the first record of *C. gigas* in Colombia. It has been previously reported from Brazil (De Oliveira et al. 2009) and French Guiana (Franco and Feitosa 2018). This record represents one of the northernmost occurrences of this species (Souza et al. 2012, Pereira Souza et al. 2015).

Biology

All specimens were collected at a depth of 10 to 20 cm in cloud forest, in the Andean-Amazonian transition zone of Caquetá.

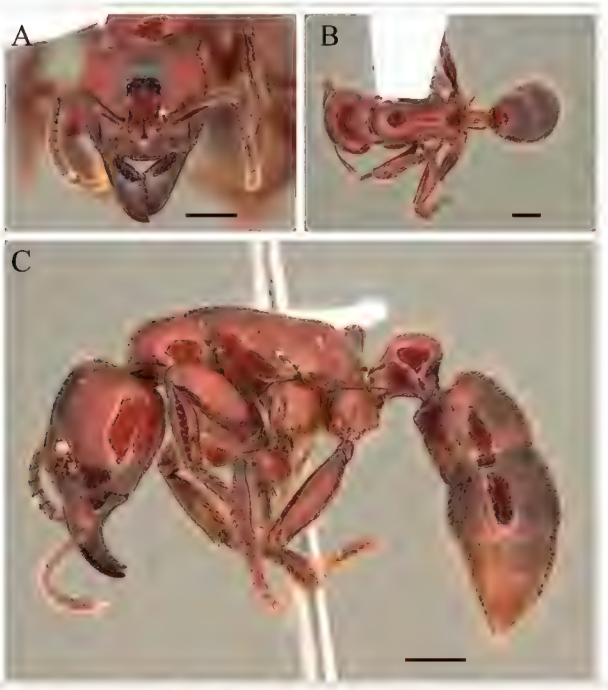

Figure 17. doi

Centromyrmex gigas worker (LEUA-00000061955) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 1.0 mm (A, B, C).

Notes

The collected *C. gigas* specimens varied in pilosity concerning the type specimen (CASENT0907212). Some specimens were with dispersed pilosity, but no dense areas on the head and dorsum of the mesosoma, smooth and shiny scapes with erect pilosity restricted to the apex.

Leptogenys unistimulosa Roger, 1863

Materials

a. scientificName: *Leptogenys unistimulosa*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Leptogenys*; specificEpithet: *unistimulosa*; scientificNameAuthorship: Roger, 1863; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. Vista Hermosa; verbatimElevation: 1207 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°48'42.4"N 75°39'48.0"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-13; individualCount: 1; sex: female; catalogNumber: LEUA-00000061893; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: CEA44053-0EC6-5C8D-924E-89F0127FD28D

b. scientificName: *Leptogenys unistimulosa*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Leptogenys*; specificEpithet: *unistimulosa*; scientificNameAuthorship: Roger, 1863; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. Vista Hermosa; verbatimElevation: 1207 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°48'42.4"N 75°39'48.0"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate:

2023-03-13; individualCount: 1; sex: female; catalogNumber: LEUA-00000061894; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: D854D143-D5EC-5962-8F14-E9DA450465B1

c. scientificName: *Leptogenys unistimulosa*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Leptogenys*; specificEpithet: *unistimulosa*; scientificNameAuthorship: Roger, 1863; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. Vista Hermosa; verbatimElevation: 1207 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°48'42.4"N 75°39'48.0"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-13; individualCount: 1; sex: female; catalogNumber: LEUA-00000061895; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 456C2B3B-75D3-5795-899F-CC0129732487

d. scientificName: *Leptogenys unistimulosa*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Leptogenys*; specificEpithet: *unistimulosa*; scientificNameAuthorship: Roger, 1863; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. Vista Hermosa; verbatimElevation: 1207 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°48'42.4"N 75°39'48.0"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-13; individualCount: 1; sex: female; catalogNumber: LEUA-00000061896; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 4F927D89-2564-555F-AA41-73AA7936FEAF

e. scientificName: *Leptogenys unistimulosa*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Leptogenys*; specificEpithet: *unistimulosa*; scientificNameAuthorship: Roger, 1863; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. Vista Hermosa; verbatimElevation: 1207 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°48'42.4"N 75°39'48.0"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-13; individualCount: 1; sex: female; catalogNumber: LEUA-00000061897; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: F6400497-61AD-52C3-869D-54C7D95758BF

f. scientificName: *Leptogenys unistimulosa*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Leptogenys*; specificEpithet: *unistimulosa*; scientificNameAuthorship: Roger, 1863; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. Vista Hermosa; verbatimElevation: 1207 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°48'42.4"N 75°39'48.0"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-13; individualCount: 1; sex: female; catalogNumber: LEUA-00000061898; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 519F2CB2-3C0E-5115-8ECC-EC94B0BD4771

g. scientificName: *Leptogenys unistimulosa*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Leptogenys*; specificEpithet:

unistimulosa; scientificNameAuthorship: Roger, 1863; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. Vista Hermosa; verbatimElevation: 1207 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°48'42.4"N 75°39'48.0"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-13; individualCount: 1; sex: female; catalogNumber: LEUA-00000061899; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: B310EF03-6282-586A-896D-F96A8851A02D

h. scientificName: *Leptogenys unistimulosa*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Leptogenys*; specificEpithet: *unistimulosa*; scientificNameAuthorship: Roger, 1863; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. Vista Hermosa; verbatimElevation: 1207 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°48'42.4"N 75°39'48.0"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-13; individualCount: 1; sex: female; catalogNumber: LEUA-00000061900; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: CA3294BF-CF52-53E7-B188-548A3EC83C48

i. scientificName: *Leptogenys unistimulosa*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Leptogenys*; specificEpithet: *unistimulosa*; scientificNameAuthorship: Roger, 1863; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. Vista Hermosa; verbatimElevation: 1207 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°48'42.4"N 75°39'48.0"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-13; individualCount: 1; sex: female; catalogNumber: LEUA-00000061901; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 449EB475-E82D-5D35-9EAE-6E6429A6450F

j. scientificName: *Leptogenys unistimulosa*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Leptogenys*; specificEpithet: *unistimulosa*; scientificNameAuthorship: Roger, 1863; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. Vista Hermosa; verbatimElevation: 1207 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°48'42.4"N 75°39'48.0"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-13; individualCount: 1; sex: female; catalogNumber: LEUA-00000061902; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: E8860E3F-A096-596A-A5A9-77A84BDD0C11

Diagnosis

This species is recognised by having, in frontal view, inner basal margin of mandible markedly separated from anterior margin of clypeus (closed mandibles); hypostomal tooth visible in whole or in part; in lateral view, petiole with sharp apical tooth (Fig. 18).

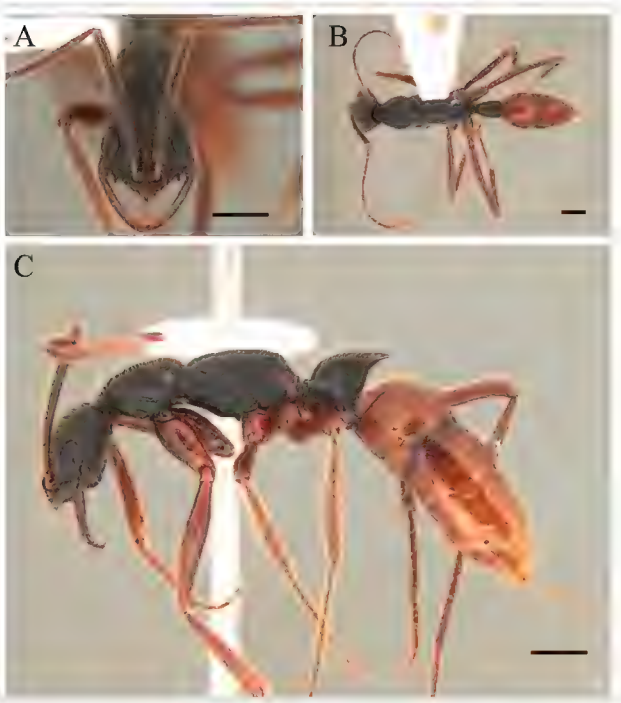

Figure 18. doi

Leptogenys unistimulosa worker (LEUA-00000061897) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 1.0 mm (A, B, C).

Distribution

This species is widely distributed in the Tropics of South America (Lattke 2011). In Colombia, it is known from the Departments of Cundinamarca and Meta (Fernández et al. 2019). It is reported here for the first time in the Department of Caquetá. In the Neotropical Region, the species has also been recorded in Bolivia, Brazil, Ecuador, Peru, Guyana, Suriname, French Guiana and Venezuela (Lattke 2011).

Biology

Specimens were collected from a log on the ground, using the TSBF sampling method in an Andean-Amazonian transition zone.

Thaumatomyrmex atrox Weber, 1939

Material

a. scientificName: *Thaumatomyrmex atrox*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Thaumatomyrmex*; specificEpithet: *atrox*; scientificNameAuthorship: Weber, 1939; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Av.Caraño, Vía Florencia-Suaza; verbatimElevation: 919 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°44'4.5"N 75°40'9.7"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Winkler; eventDate: 2023-09-30; individualCount: 1; sex: female; catalogNumber: LEUA-00000066493; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: B9C3CFFA-47CB-5C66-BE57-8CE85C4D678E

Diagnosis

This species is recognised by the fact that, in frontal view, the apex of the apical tooth of the mandible clearly exceeds the lateral margin of the head and the external margin of the eye (Fig. 19).

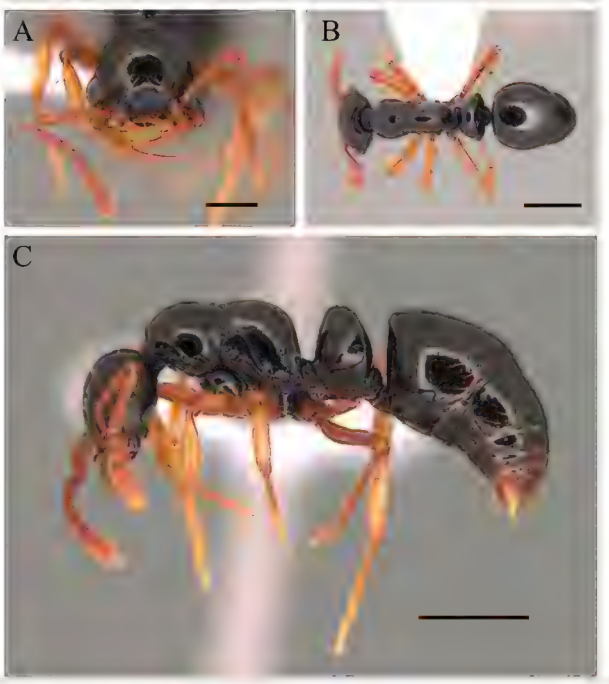

Figure 19. doi

Thaumatomyrmex atrox worker (LEUA-00000066493) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 0.5 mm (A); 1.0 mm (B, C).

Distribution

Thaumatomyrmex atrox is widely distributed in the Neotropical Region (Brandão 1991, Rodríguez and Lattke 2012, Albuquerque et al. 2021). In Colombia, *T. atrox* is widely distributed in the Andean and Caribbean Regions (Vergara-Navarro and Serna 2013), with a single record from the Department of Amazonas (Jahyny et al. 2008). It is reported here for the first time in the Department of Caquetá.

Biology

The specimen was collected in leaf litter from the lowest cloud forest in they Andean-Amazonian transition zone.

Wadeura holmgrenita Branstetter & Longino, 2022

Materials

a. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura*; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Av. Caraño, Fca. El Chorro; verbatimElevation: 739 m; locationRemarks: From 10 cm to 20 cm deep in the ground; verbatimCoordinates:

01°44'27.2"N 75°39'12.3"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2022-12-08; individualCount: 1; sex: female; catalogNumber: LEUA-00000061750; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: FA2782AD-E3D0-580A-86C4-038761961125

b. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura*; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. San Luis, Fca. El Triunfo; verbatimElevation: 700 m; locationRemarks: From 10 cm to 20 cm deep in the ground; verbatimCoordinates: 01°41'53.2"N 75°37'36.1"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2022-12-09; individualCount: 1; sex: female; catalogNumber: LEUA-00000061752; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 5F6ECA96-0084-5FCC-8385-B7FE200C341D

c. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura*; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. San Luis, Fca. El Triunfo; verbatimElevation: 700 m; locationRemarks: From 10 cm to 20 cm deep in the groundo; verbatimCoordinates: 01°41'53.2"N 75°37'36.1"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2022-12-09; individualCount: 1; sex: female; catalogNumber: LEUA-00000061755; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: F6C04C00-C85F-5742-9A87-C4E705174915

d. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura*; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Paz, Fca. Patio Bonito; verbatimElevation: 663 m; locationRemarks: From 0 cm to 10 cm deep in the ground; verbatimCoordinates: 01°43'41.6"N 75°37'48.1"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000061756; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 87966962-B7CA-5B4B-BE23-CD84039EC096

e. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura* ; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. San Antonio; verbatimElevation: 1409 m; locationRemarks: From 0 cm to 10 cm deep in the ground; verbatimCoordinates: 01°49'34.3"N 75°40'10.5"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-17; individualCount: 1; sex: female;

catalogNumber: LEUA-00000061757; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: D62E35AC-5135-55B2-9978-881BA9C8C65E

f. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura* ; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. La Fortaleza; verbatimElevation: 1235 m; locationRemarks: From 10 cm to 20 cm deep in the ground; verbatimCoordinates: 01°48'18.5"N 75°39'14.0"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-10; individualCount: 1; sex: female; catalogNumber: LEUA-00000061772; recordedBy: Kenna Martinez; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 9915C171-7AB1-57DE-A186-C5152A872822

g. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura* ; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Paz, Fca. Patio Bonito; verbatimElevation: 663 m; locationRemarks: From 10 cm to 20 cm deep in the ground; verbatimCoordinates: 01°43'41.6"N 75°37'48.1"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000061775; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: E224FABF-DF67-53D4-9748-3AD3A6ECEA86

h. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura* ; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Paz, Fca. Patio Bonito; verbatimElevation: 663 m; locationRemarks: From 10 cm to 20 cm deep in the ground; verbatimCoordinates: 01°43'41.6"N 75°37'48.1"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000061776; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: D6CCBEB7-CCD5-5952-9BCB-D24878D25482

i. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura* ; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Paz, Fca. Patio Bonito; verbatimElevation: 663 m; locationRemarks: From 10 cm to 20 cm deep in the ground; verbatimCoordinates: 01°43'41.6"N 75°37'48.1"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000061777; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA);

basisOfRecord: PreservedSpecimen; occurrenceID: C7E81D31-708A-5BB5-A1B7-57BBD7F0D9BE

j. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura* ; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Paz, Fca. Patio Bonito; verbatimElevation: 663 m; locationRemarks: From 10 cm to 20 cm deep in the ground; verbatimCoordinates: 01°43'41.6"N 75°37'48.1"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000061778; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 614421D4-5925-5B15-BD18-6057E87971E5

k. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura* ; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Paz, Fca. Las Mercedes; verbatimElevation: 618 m; locationRemarks: From 0 cm to 10 cm deep in the ground; verbatimCoordinates: 01°43'39.2"N 75°38'00.7"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-15; individualCount: 1; sex: female; catalogNumber: LEUA-00000061779; recordedBy: Kenna Martinez; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: AC14A467-A128-50C4-B6D8-A23807D747E7

l. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura*; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Paz, Fca. Esperanza del Ruiseñor; verbatimElevation: 631 m; locationRemarks: From 20 cm to 30 cm deep in the ground; verbatimCoordinates: 01°43'47.4"N 75°37'40.0"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-13; individualCount: 1; sex: female; catalogNumber: LEUA-00000061810; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 9FBA8FF6-CCAA-535A-B0DC-81711012B1F0

m. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura*; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Paz, Fca. Patio Bonito; verbatimElevation: 663 m; locationRemarks: From 0 cm to 10 cm deep in the ground; verbatimCoordinates: 01°43'41.6"N 75°37'48.1"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000061940; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 4D1F3B9F-CCEC-5D03-B3FD-762881629DDC

n. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura*; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Paz, Fca. Patio Bonito; verbatimElevation: 663 m; locationRemarks: From 0 cm to 10 cm deep in the ground; verbatimCoordinates: 01°43'41.6"N 75°37'48.1"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000061941; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 7F559F62-7E9B-5442-A43E-A6CC039AF368

o. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura*; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Paz, Fca. Patio Bonito; verbatimElevation: 663 m; locationRemarks: From 0 cm to 10 cm deep in the ground; verbatimCoordinates: 01°43'41.6"N 75°37'48.1"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000061942; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: F61708A7-8A66-515C-A92F-2DA35FF32174

p. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura*; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Av. Caraño, Fca. La Esperanza; verbatimElevation: 604 m; locationRemarks: From 10 cm to 20 cm deep in the ground; verbatimCoordinates: 01°43'45.2"N 75°38'57.2"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-03-22; individualCount: 1; sex: female; catalogNumber: LEUA-00000061959; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: F677B4C3-F4F9-5F12-8397-C5D8F7E9848C

q. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura*; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Paz, Fca. Patio Bonito; verbatimElevation: 663 m; locationRemarks: From 20 cm to 30 cm deep in the ground; verbatimCoordinates: 01°43'41.6"N 75°37'48.1"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000062154; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 0153C4B6-A589-5BBE-9D4F-CD3BD35E9F18

r. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura*; specificEpithet:

holmgrenita; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Paz, Fca. Patio Bonito; verbatimElevation: 663 m; locationRemarks: From 20 cm to 30 cm deep in the ground; verbatimCoordinates: 01°43'41.6"N 75°37'48.1"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000062155; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 9C80F28B-DE72-5F11-84F2-2B1092A98FA9

s. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura*; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Paz, Fca. Patio Bonito; verbatimElevation: 663 m; locationRemarks: From 20 cm to 30 cm deep in the ground; verbatimCoordinates: 01°43'41.6"N 75°37'48.1"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-14; individualCount: 1; sex: female; catalogNumber: LEUA-00000062156; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 147B4F3E-B428-5585-9C90-3B680399ADD5

t. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura*; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Carbona, Fca. La Florida; verbatimElevation: 543 m; locationRemarks: From 0 cm to 10 cm deep in the ground; verbatimCoordinates: 01°42'12.5"N 75°38'05.4"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-05-17; individualCount: 1; sex: female; catalogNumber: LEUA-00000062472; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 339AAFF3-F3D1-5987-8217-4E9FF729310D

u. scientificName: *Wadeura holmgrenita*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura*; specificEpithet: *holmgrenita*; scientificNameAuthorship: Branstetter & Longino, 2022; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. La Carbona, Fca. La Florida; verbatimElevation: 543 m; locationRemarks: From 0 cm to 10 cm deep in the ground; verbatimCoordinates: 01°42'12.5"N 75°38'05.4"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-05-17; individualCount: 1; sex: female; catalogNumber: LEUA-00000062473; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: DE8A174E-3CCF-5391-A57B-F2FA85284C47

Diagnosis

This species is distinguished by a small triangular projection of the medial clypeus, not projecting beyond the outline of the clypeolabral junction; further, ventral margin of petiole is less symmetrical (Fig. 20).

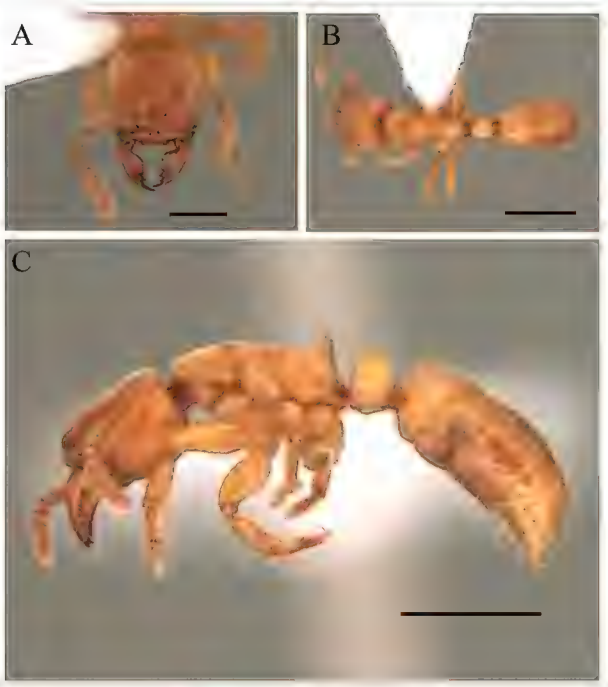

Figure 20. doi

Wadeura holmgrenita worker (LEUA-00000061779) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 0.5 mm (A); 1.0 (B, C).

Distribution

Wadeura holmgrenita was previously known from Peru (Madre de Dios and Cusco) (Branstetter and Longino 2022). Although *W. holmgrenita* is considered a rarely collected species, our collection data suggest that it is widely distributed in the Basin of the Rio Hacha. This record represents the second known occurrence of the species in South America and the first record in Colombia.

Biology

The workers were collected 20 cm deep on the ground in the cloud forest of the Andean-Amazonian transition zone in Caquetá. Delabie et al. (2000) mentioned that *Wadeura* species could be specialised predators of soil termites.

Notes

The Colombian population of *W. holmgrenita* match largely with the type material of the species, at least in the shape of the subpeciolar process, mandibles and clypeus. The specimens from Caquetá present a slight variation in pilosity, having erect and suberect pilosity on the lateral margins of the head and generating an appearance of dense pilosity.

Wadeura pauli (Fernandes & Delabie, 2019)

Materials

a. scientificName: *Wadeura pauli*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura*; specificEpithet: *pauli*; scientificNameAuthorship: (Fernandes & Delabie, 2019); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Av. Caraño, Fca. El Chorro; verbatimElevation: 739 m; locationRemarks: From 0 cm to 10 cm deep in the ground; verbatimCoordinates: 01°44'28.9"N 75°39'12.8"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2022-12-08; individualCount: 1; sex: female; catalogNumber: LEUA-00000061751; recordedBy: Brahyam Quimbaya; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: D22755A5-0B4F-516A-8D4B-5B5650603D66

b. scientificName: *Wadeura pauli*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura*; specificEpithet: *pauli*; scientificNameAuthorship: (Fernandes & Delabie, 2019); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Sucre, Fca. Carlos Endo; verbatimElevation: 998 m; locationRemarks: From 0 cm to 10 cm deep in the ground; verbatimCoordinates: 01°47'44.4"N 75°38'46.5"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-02-09; individualCount: 1; sex: female; catalogNumber: LEUA-00000061987; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 72598922-4891-5DDD-ACB7-7787D7620C0A

c. scientificName: *Wadeura pauli*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Wadeura*; specificEpithet: *pauli*; scientificNameAuthorship: (Fernandes & Delabie, 2019); continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. San Francisco, Fca. La Esmeralda; verbatimElevation: 661 m; locationRemarks: From 10 cm to 20 cm deep in the ground; verbatimCoordinates: 01°43'00.6"N 75°35'37.7"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Monolite / TSBF; eventDate: 2023-04-19; individualCount: 1; sex: female; catalogNumber: LEUA-00000062000; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: 32D248E8-C736-5CE1-868B-9B75DAB5ABE2

Diagnosis

This species is distinguished by the mandible triangular; ventral margin of petiole less symmetrical; ventral margin of petiole a triangular lobe with pronounced anterior tooth (Fig. 21).

Distribution

This is the first record of the species in Colombia, previously known from Guyana and Brazil, with records from only two localities, respectively (Branstetter and Longino 2022).

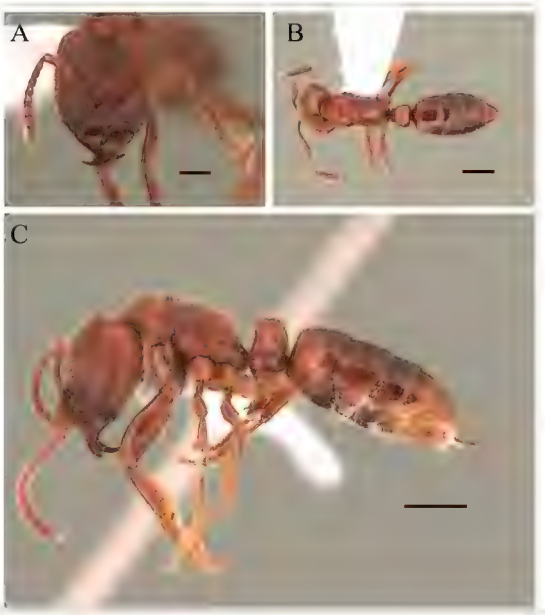

Figure 21. doi

Wadeura pauli worker (LEUA-00000061987) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 0.5 mm (A); 1.0 (B, C).

Biology

W. pauli was collected 20 cm deep on the ground, in the cloud forest of the Andean-Amazonian transition zone in Caquetá.

Notes

The population of *W. pauli* found in this study resemble morphologically the holotype, the shape of the subpeciolar process and dentition of the mandible matching the description of the species. Some specimens present a slight variation in pilosity, with areas of dense erect and suberect pilosity on the lateral margins of the head and dorsum of the mesosoma. In dorsal view, the petiole has a wider anterior face giving a trapezoidal shape to the petiole.

Probolomyrmex kelleri Oliveira & Feitosa, 2019

Materials

a. scientificName: *Probolomyrmex kelleri*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Probolomyrmex* ; specificEpithet: *kelleri*; scientificNameAuthorship: Oliveira & Feitosa, 2019; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Las Doradas, Fca. Palmichal; verbatimElevation: 684 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°43'01.3"N 75°40'24.2"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Winkler; eventDate: 2023-05-15; individualCount: 1; sex: female; catalogNumber: LEUA-00000066494; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: B8724BBD-7DAB-50B8-A0C1-1540233729BD

b. scientificName: *Probolomyrmex kelleri*; kingdom: Animalia; phylum: Arthropoda; class: Insecta; order: Hymenoptera; family: Formicidae; genus: *Probolomyrmex* ; specificEpithet: *kelleri*; scientificNameAuthorship: Oliveira & Feitosa, 2019; continent: South America; country: Colombia; countryCode: CO; stateProvince: Caquetá; county: Florencia; locality: Vda. Las Doradas, Fca. Palmichal; verbatimElevation: 684 m; locationRemarks: Collected in leaf Litter; verbatimCoordinates: 01°43'01.3"N 75°40'24.2"W; verbatimCoordinateSystem: WGS84; samplingProtocol: Winkler; eventDate: 2023-05-15; individualCount: 1; sex: female; catalogNumber: LEUA-00000066495; recordedBy: Brandon S. Arredondo; language: es; collectionID: RNC:270; institutionCode: Universidad de la Amazonia (UDLA); basisOfRecord: PreservedSpecimen; occurrenceID: A7C759B7-128B-5420-BD08-6A8D95ADEA42

Diagnosis

This species is distinguished from the other *Probolomyrmex* species by the presence of subpetiolar process well developed, ventrally concave to sub-rectangular, with the postero-ventral angle acute and directed towards the gaster; prora and protuberance on the posterior region of the first gastral tergite present. (Fig. 22)

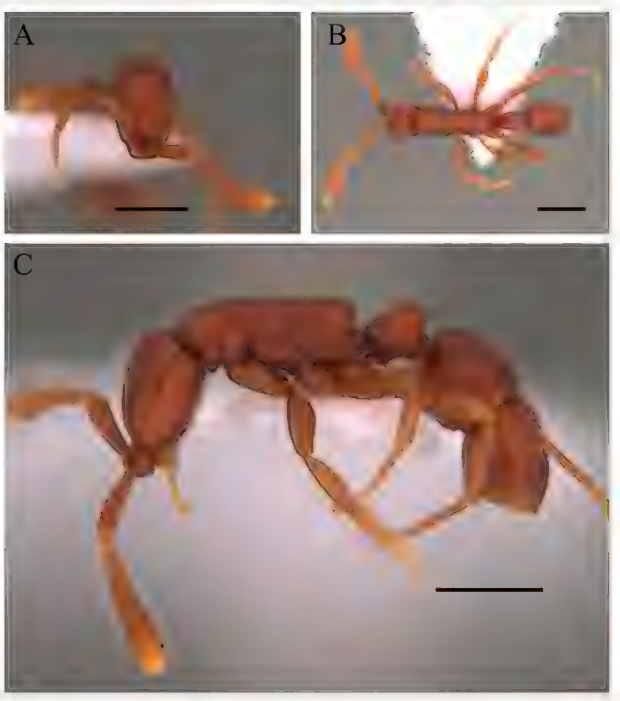

Figure 22. doi

Probolomyrmex kelleri worker (LEUA-00000066494) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 0.5 mm (A, B, C).

Distribution

This is the first record of the species for Colombia. Previously, this species had been recorded in Guyana, Peru and Venezuela. (Oliveira and Feitosa 2019).

Biology

The specimens were collected in leaf litter in the cloud forest in the Andean-Amazonian transition zone of Caquetá.

Notes

We document here the first case for the species of an ergatoid queen (Fig. 23). The ergatoid queen has developed compound eyes and ocelli; further, the mesosoma is a little wider and higher than workers. The shape of the subpetiolar process in the ergatoid queen and the worker is identical, this feature being important to separate *P. kelleri* from any other species of this genus.

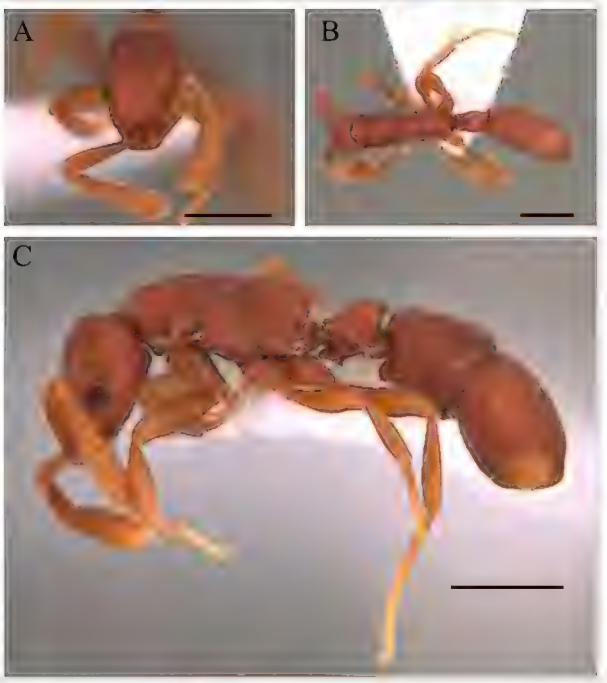

Figure 23. doi

Probolomyrmex kelleri ergatoid (LEUA-00000066495) **A** head in frontal view; **B** body in dorsal view; **C** body in lateral view. Scale bars: 0.5 mm (A, B, C).

Checklist of ant species of Caquetá Department (Colombia)

Fulakora orizabana (Brown, 1960)

Distribution: Caquetá, Caldas, Cauca, Chocó, Quindío, Risaralda, Valle del Cauca (Fernández et al. 2019).

Prionopelta amabilis Borgmeier, 1949

Distribution: Amazonas, Antioquia, Caquetá, Cauca, Meta, Nariño, Quindío, Santander, Valle del Cauca, Vaupés (Fernández et al. 2019, Ladino and Feitosa 2020).

Prionopelta antillana Forel, 1909

Distribution: Amazonas, Caquetá, Caldas, Cauca, Magdalena, Nariño, Putumayo, Valle del Cauca (Chacón de Ulloa et al. 2012, Fernández et al. 2019).

Dolichoderus abruptus (Smith, 1858)

Distribution: Amazonas, Antioquia, Caquetá, Guaviare, Meta (Fernández et al. 1996, Fernández et al. 2019).

Dolichoderus attelaboides (Fabricius, 1775)

Distribution: Amazonas, Antioquia, Caquetá, Guaviare, Meta, Putumayo, Valle del Cauca, Vaupés, Vichada (Fernández et al. 1996, Fernández et al. 2019).

Dolichoderus bidens (Linnaeus, 1758)

Distribution: Amazonas, Boyacá, Caquetá, Chocó, Guaviare, Magdalena, Meta, Valle del Cauca (Fernández et al. 1996, Ortíz and Fernández 2011, Fernández et al. 2019).

Dolichoderus bispinosus (Olivier, 1792)

Distribution: Amazonas, Antioquia, Bolivar, Caldas, Caquetá, Chocó, Cundinamarca, Guaviare, La Guajira, Magdalena, Meta, Putumayo, Risaralda, Santander, Sucre, Valle del Cauca, Vichada (Fernández et al. 1996, Fernandez and Sendoya 2004, Ortíz and Fernández 2011, Fernández et al. 2019).

Dolichoderus cogitans Forel, 1912

Distribution: Amazonas, Antioquia, Boyacá, Caquetá, Meta (Fernández et al. 1996, Fernández et al. 2019).

Dolichoderus curvilobus (Lattke, 1987)

Distribution: Amazonas, Antioquia, Boyacá, Caquetá, Chocó, Nariño, Santander, Valle del Cauca (Fernández et al. 1996, Ortíz and Fernández 2011, Fernández et al. 2019).

Dolichoderus debilis Emery, 1890

Distribution: Amazonas, Antioquia, Bolivar, Caquetá, Cauca, La Guajira, Magdalena, Meta, Putumayo (Ortíz and Fernández 2011, Fernández et al. 2019).

Notes: New record from Caquetá

Dolichoderus decollatus Smith, 1858

Distribution: Amazonas, Antioquia, Caldas, Caquetá, Chocó, Cundinamarca, La Guajira, Magdalena, Meta, Putumayo, Risaralda, Vichada (Fernández et al. 2019).

Dolichoderus ferrugineus Forel, 1903

Distribution: Amazonas, Caquetá, Putumayo, Vaupés (Fernández et al. 1996, Ortíz and Fernández 2011, Fernández et al. 2019).

Dolichoderus ghilianii Emery, 1894

Distribution: Amazonas, Antioquia, Caquetá, Chocó (Fernández et al. 1996, Fernández et al. 2019).

Dolichoderus imitator Emery, 1894

Distribution: Amazonas, Antioquia, Caldas, Caquetá, Cundinamarca, Guainía, Guaviare, Magdalena, Meta, Putumayo, Vaupés, Valle del Cauca (Ortíz and Fernández 2011, Castro et al. 2018, Fernández et al. 2019).

Dolichoderus inpai (Harada, 1987)

Distribution: Amazonas, Caquetá, Meta (Fernández et al. 1996, Fernández et al. 2019).

Dolichoderus lamellosus (Mayr, 1870)

Distribution: Amazonas, Caquetá, Chocó, Magdalena, Meta, Putumayo (Fernández et al. 1996, Fernández et al. 2019).

Dolichoderus lutosus (Smith, 1858)

Distribution: Amazonas, Antioquia, Bolívar, Caquetá, Cauca, Cundinamarca, La Guajira, Magdalena, Meta, Valle del Cauca, Vaupés, Vichada (Chacón de Ulloa and Abadía 2014, Fernández et al. 2019).

Dolichoderus mucronifer (Roger, 1862)

Distribution: Amazonas, Caquetá (Fernández et al. 1996, Fernández et al. 2019).

Dolichoderus quadridenticulatus (Roger, 1862)

Distribution: Amazonas, Antioquia, Caquetá, Chocó, Meta, Santander, Valle del Cauca (Fernández et al. 1996, Fernández et al. 2019).

Dolichoderus rugosus (Smith, 1858)

Distribution: Amazonas, Antioquia, Caquetá, Putumayo (Fernández et al. 2019).

Notes: New record from Caquetá

Dolichoderus schulzi Emery, 1894

Distribution: Amazonas, Antioquia, Caquetá (Fernández et al. 1996, Fernández et al. 2019).

Dorymyrmex brunneus Forel, 1908

Distribution: Amazonas, Antioquia, Boyacá, Caldas, Caquetá, Cundinamarca, Nariño, Meta, Quindío, Santander, Tolima, Valle del Cauca, Vichada (Fernández et al. 2019).

Gracilidris pombero Wild & Cuezzo, 2006

Distribution: Caquetá (Fernández et al. 2019).

Linepithema angulatum (Emery, 1894)

Distribution: Boyacá, Caldas, Caquetá, Cauca, Cundinamarca, Huila, Magdalena, Meta, Nariño, Putumayo, Quindío, Risaralda, Santander, Tolima, Vichada, Valle del Cauca (Fernández et al. 2019).

Linepithema neotropicum Wild, 2007

Distribution: Antioquia, Boyacá, Caldas, Caquetá, Cauca, Cundinamarca, La Guajira, Huila, Magdalena, Meta, Tolima, Nariño, Quindío, Risaralda, Valle del Cauca, Vichada (Escárraga and Guerrero 2016, Fernández et al. 2019).

Linepithema piliferum (Mayr, 1870)

Distribution: Antioquia, Boyacá, Caldas, Caquetá, Cauca, Cundinamarca, Chocó, Huila, La Guajira, Nariño, Norte de Santandertander, Putumayo, Quindío, Risaralda, Tolima, Valle del Cauca (Fernández et al. 2019).

Tapinoma melanocephalum (Fabricius, 1793)

Distribution: Present throughout the country (Fernández et al. 2019).

Cheliomyrmex andicola Emery, 1894

Distribution: Amazonas, Antioquia, Caquetá, Cauca, Cundinamarca, Meta, Nariño, Risaralda, Tolima, Valle del Cauca (Sandoval and Zambrano 2007, Sanabria-Blandón and Achury 2011, Fernández et al. 2019).

Eciton burchellii (Westwood, 1842)

Distribution: Amazonas, Antioquia, Bolivar, Caldas, Caquetá, Cauca, Casanare, Chocó, Cundinamarca, La Guajira, Guaviare, Huila, Magdalena, Meta, Nariño, Putumayo, Risaralda, Santander, Tolima, Vichada (Fernández et al. 1996, Fernández et al. 2019).

Eciton dulcium Forel, 1912

Distribution: Amazonas, Caquetá, Huila, Valle del Cauca (Sanabria-Blandón and Achury 2011, Fernández et al. 2019).

Eciton hamatum (Fabricius, 1782)

Distribution: Antioquia, Caquetá, Chocó, Cundinamarca, Guaviare, Huila, La Guajira, Magdalena, Meta, Nariño, Risaralda, Tolima, Valle del Cauca (Fernández et al. 1996, Fernández et al. 2019).

Eciton rapax Smith, 1855

Distribution: Amazonas, Caquetá, Guaviare, Meta, Putumayo (Fernández et al. 1996 , Fernández et al. 2019).

Eciton vagans (Olivier, 1792)

Distribution: Amazonas, Caldas, Caquetá, Cauca, Casanare, Chocó, Cundinamarca, Guaviare, Huila, Magdalena, Meta, Nariño, Valle del Cauca (Fernández et al. 1996, Fernández et al. 2019).

Labidus coecus (Latreille, 1802)

Distribution: Amazonas, Antioquia, Bolívar, Boyacá, Caldas, Caquetá, Casanare, Chocó, Cundinamarca, Guaviare, Magdalena, Meta, Nariño, Quindío, Risaralda, Santander, Tolima, Valle del Cauca (Sanabria-Blandón and Achury 2011, Fernández et al. 2019).

Labidus praedator (Smith, 1858)

Distribution: Amazonas, Antioquia, Arauca, Bolívar, Boyacá, Caquetá, Cauca, Casanare, Chocó, Cundinamarca, Guaviare, Huila, Magdalena, Nariño, Quindío, Risaralda, Tolima, Valle del Cauca (Castro et al. 2018, Fernández et al. 2019).

Neivamyrmex clavifemur Borgmeier, 1953

Distribution: Caquetá (Fernández et al. 2019).

Neivamyrmex punctaticeps (Emery, 1894)

Distribution: Amazonas, Boyacá, Caquetá, Cauca, Cundinamarca, Nariño, Santander, Tolima (Gracía-Cardenas et al. 2018, Fernández et al. 2019).

Nomamyrmex esenbeckii (Westwood, 1842)

Distribution: Amazonas, Antioquia, Arauca, Bolívar, Caldas, Caquetá, Chocó, Cundinamarca, Magdalena, Meta, Nariño, Santander, Tolima, Valle del Cauca (Fernández et al. 1996, Fernández et al. 2019).

Syscia austrella Longino & Branstetter, 2021

Distribution: Caquetá, Vaupés (Longino and Branstetter 2021).

Syscia minuta Longino & Branstetter, 2021

Distribution: Caquetá (Longino and Branstetter 2021).

Acanthoponera minor (Forel, 1899)

Distribution: Antioquia, Caquetá, Chocó, Magdalena, Norte de Santander, Risaralda, Valle del Cauca (Fernández et al. 2019).

Bazboltonia microps (Borgmeier, 1957)

Distribution: Amazonas, Antioquia, Caldas, Caquetá, Cauca, Huila, Quindío, Risaralda, Santander, Tolima, Valle del Cauca (Fernández et al. 2019).

Ectatomma brunneum Smith, 1858

Distribution: Amazonas, Antioquia, Boyacá, Caquetá, Cundinamarca, Chocó, Guaviare, Meta, Quindío, Sucre, Valle del Cauca, Vichada (Fernández et al. 2019).

Ectatomma edentatum Roger, 1863

Distribution: Amazonas, Caquetá, Meta, Valle del Cauca (Fernández et al. 2019).

Ectatomma goninion Kugler & Brown, 1982

Distribution: Caquetá, Chocó, Cauca, Nariño, Risaralda (Lozano-Zambrano et al. 2008, Fernández et al. 2019).

Ectatomma lugens Emery, 1894

Distribution: Amazonas, Caquetá, Cauca, Meta, Putumayo, Valle del Cauca (Kugler 1991, Lozano-Zambrano et al. 2008, Fernández et al. 2019).

Ectatomma ruidum (Roger, 1860)

Distribution: Amazonas, Antioquia, Atlántico, Bolívar, Boyacá, Caquetá, Córdoba, Cundinamarca, Chocó, Huila, Magdalena, Meta, Santander, Sucre, Tolima, Valle del Cauca, Vichada (Fernández et al. 2019).

Ectatomma tuberculatum (Olivier, 1792)

Distribution: Amazonas, Antioquia, Caquetá, Casanare, Cauca, Cundinamarca, Chocó, Guaviare, Magdalena, Meta, Nariño, Risaralda, Santander, Valle del Cauca, Vichada (Castro et al. 2018, Fernández et al. 2019).

Gnamptogenys acuminata (Emery, 1896)

Distribution: Caquetá, Meta, Caquetá, Nariño, Putumayo, Valle del Cauca (Fernández et al. 2019).

Gnamptogenys annulata (Mayr, 1887)

Distribution: Amazonas, Antioquia, Caquetá, Cauca, Cundinamarca, Meta, Nariño, Norte de Santander, Quindío, Valle del Cauca (Fernández et al. 2019).

Gnamptogenys concinna (Smith, 1858)

Distribution: Amazonas, Caquetá, Meta, Nariño, Valle del Cauca (Fernández et al. 2019).

Gnamptogenys continua (Mayr, 1887)

Distribution: Amazonas, Antioquia, Caldas, Caquetá, Cauca, Cundinamarca, Magdalena, Nariño, Valle del Cauca (Fernández et al. 2019).

Gnamptogenys ericae (Forel, 1912)

Distribution: Amazonas, Atlántico, Bolívar, Caquetá, Casanare, La Guajira, Magdalena, Meta, Putumayo, Sucre, Vichada (Fernández et al. 2019).

Gnamptogenys fernandezi Lattke, 1990

Distribution: Caquetá, Cauca, Valle del Cauca, Vaupés (Fernández et al. 2019).

Gnamptogenys haenschi (Emery, 1902)

Distribution: Amazonas, Antioquia, Caquetá, Cauca, Chocó, La Guajira, Magdalena, Meta, Risaralda, Valle del Cauca (Fernández et al. 2019).

Gnamptogenys hartmani (Wheeler, 1915)

Distribution: Antioquia, Caquetá (Fernández et al. 2019).

Gnamptogenys horni (Santschi, 1929)

Distribution: Antioquia, Caquetá, Cauca, Chocó, Guaviare, Meta, Nariño, Putumayo, Risaralda, Valle del Cauca, Vaupés (Fernández et al. 2019).

Gnamptogenys kempfi Lenko, 1964

Distribution: Amazonas, Caquetá (Fernández et al. 2019).

Gnamptogenys mordax (Smith F, 1858)

Distribution: Amazonas, Antioquia, Caquetá, Chocó, Cundinamarca, Norte de Santander, Risaralda, Santander, Valle del Cauca (Fernández et al. 2019).

Gnamptogenys regularis Mayr, 1870

Distribution: Amazonas, Bolívar, Boyacá, Caquetá, Cauca, Magdalena, Meta, Putumayo, Valle del Cauca (Fernández et al. 2019).

Gnamptogenys sulcata (Smith F, 1858)

Distribution: Amazonas, Antioquia, Atlántico, Caquetá, Casanare, Cauca, Chocó, Magdalena, Meta, Nariño, Putumayo, Sucre, Valle del Cauca, Vaupés (Fernández et al. 2019).

Gnamptogenys tortuolosa (Smith F, 1858)

Distribution: Amazonas, Caquetá, Cundinamarca, Chocó, Guaviare, Meta, Putumayo (Lattke et al. 2004, Fernández et al. 2019).

Heteroponera monticola Kempf & Brown, 1970

Distribution: Antioquia, Caldas, Caquetá, Cundinamarca, Huila, Meta, Nariño, Quindío, Risaralda, Valle del Cauca (Fernández et al. 2019).

Holcoponera andina (Lattke, 1995)

Distribution: Amazonas, Antioquia, Caldas, Caquetá, Nariño, Norte de Santander, Quindío, Risaralda, Valle del Cauca, Vichada (Fernández et al. 2019).

Holcoponera mina Brown, 1956

Distribution: Amazonas, Caquetá, Nariño, Putumayo, Valle del Cauca (Calle et al. 2013, Fernández et al. 2019).

Holcoponera moelleri Forel, 1912

Distribution: Amazonas, Boyacá, Caquetá, Cauca, Chocó, Cundinamarca, Meta, Nariño, Norte de Santander, Putumayo, Vaupés (Fernández et al. 2019).

Holcoponera nigrivitrea (Lattke, 1995)

Distribution: Caldas, Caquetá, Cundinamarca, Huila, Nariño, Putumayo, Quindío, Risaralda, Santander, Valle del Cauca (Fernández et al. 2019).

Holcoponera pleurodon (Emery, 1896)

Distribution: Amazonas, Caquetá, Guaviare, Magdalena, Nariño, Putumayo, Valle del Cauca (Fernández et al. 2019).

Holcoponera porcata (Emery, 1896)

Distribution: Antioquia, Caquetá, Chocó, Cundinamarca, La Guajira, Guaviare, Huila, Nariño, Norte de Santander, Santander, Valle del Cauca (Fernández et al. 2019).

Holcoponera striatula (Mayr, 1884)

Distribution: Amazonas, Antioquia, Atlántico, Bolívar, Caldas, Caquetá, Chocó, Cundinamarca, Guaviare, Meta, Nariño, Norte de Santander, Quindío, Risaralda, Valle del Cauca, Vaupés (Fernández et al. 2019).

Holcoponera strigata (Norton, 1871)

Distribution: Antioquia, Caldas, Caquetá, Cundinamarca, Huila, Nariño, Norte de Santander, Putumayo, Quindío, Risaralda, Valle del Cauca, Vichada (Fernández et al. 2019).

Typhlomyrmex clavicornis Emery, 1906

Distribution: Caquetá, Putumayo (Castro et al. 2018, Fernández et al. 2019).

Typhlomyrmex major Santschi, 1923

Distribution: Amazonas, Caquetá, Nariño (Castro et al. 2018, Fernández et al. 2019).

Typhlomyrmex meire Lacau et al., 2004

Distribution: Caquetá (Castro et al. 2018).

Typhlomyrmex prolatus Brown, 1965

Distribution: Caquetá (Fernández et al. 2023).

Typhlomyrmex pusillus Emery, 1894

Distribution: Antioquia, Caldas, Caquetá, Cauca, Nariño, Quindío, Risaralda, Valle del Cauca (Fernández et al. 2019).

Typhlomyrmex rogenhoferi Mayr, 1862

Distribution: Amazonas, Caldas, Caquetá, Cauca, Cundinamarca, Huila, Meta, Valle del Cauca (Fernández et al. 2019).

Acropyga exsanguis (Wheeler, 1909)

Distribution: Antioquia, Caquetá, Cundinamarca, Risaralda, Valle del Cauca (Chacón de Ulloa et al. 2012, LaPolla 2004, Castro et al. 2018, Fernández et al. 2019).

Acropyga goeldii Forel, 1893

Distribution: Amazonas, Antioquia, Caquetá, Risaralda, Valle del Cauca (Fernández et al. 1996, Vergara-Navarro and Serna 2013, Castro et al. 2018, Fernández et al. 2019).

Brachymyrmex australis Forel, 1901

Distribution: Bolívar, Caquetá, Cauca, Caldas, Cundinamarca, Huila, La Guajira, Meta, Quindío, Risaralda, Valle del Cauca, Vichada (Fernández et al. 2019, Ortiz-Sepuvelda et al. 2019).

Brachymyrmex cordemoyi Forel, 1895

Distribution: Caquetá, Huila, Meta (Fernández et al. 2019).

Brachymyrmex pictus Mayr, 1887

Distribution: Caquetá, Cauca, Magdalena, Putumayo, Valle del Cauca (Calle et al. 2013, Fernández et al. 2019).

Camponotus amoris Forel, 1904

Distribution: Amazonas, Antioquia, Caquetá, Cundinamarca, Quindío, Valle del Cauca (Fernández et al. 2019).

Camponotus arboreus (Smith, 1858)

Distribution: Amazonas, Caquetá, Cundinamarca, Tolima, Huila, Caquetá (Fernández et al. 2019).

Camponotus blandus (Smith, 1858)

Distribution: Amazonas, Antioquia, Arauca, Atlántico, Bolívar, Boyacá, Caldas, Caquetá, Casanare, Cesar, Cundinamarca, Guainía, Huila, La Guajira, Magdalena, Meta, Norte de Santander, Santander, Sucre, Tolima, Valle del Cauca (Fernández et al. 2019).

Camponotus bonariensis Mayr, 1868

Distribution: Boyacá, Caquetá, Cundinamarca, Nariño (Fernández et al. 2019).

Camponotus cacicus Emery, 1903

Distribution: Amazonas, Caquetá, Quindío, Valle del Cauca (Castro et al. 2018, Fernández et al. 2019).

Camponotus canescens Mayr, 1870

Distribution: Amazonas, Antioquia, Chocó, Caquetá, Cundinamarca, Huila, Meta, Quindío, Risaralda, Valle del Cauca (Fernández et al. 2019).

Camponotus coloratus Forel, 1904

Distribution: Antioquia, Bolívar, Boyacá, Caquetá Casanare, Cundinamarca, Huila, La Guajira, Magdalena, Meta, Santander, Sucre, Tolima, Vichada (Fernández et al. 2019).

Camponotus conspicuus (Smith, 1858)

Distribution: Amazonas, Antioquia, Caquetá, Valle del Cauca (Fernández et al. 2019).

Camponotus excisus Mayr, 1870

Distribution: Amazonas, Antioquia, Caquetá, Cauca, Chocó, Cundinamarca, Guaviare, Huila, Magdalena, Meta, Valle del Cauca (Fernández et al. 2019).

Camponotus fasciatellus Dalla Torre, 1892

Distribution: Bolívar, Caquetá, Chocó, Cundinamarca, Guaviare, Huila, Meta, Tolima (Fernández et al. 2019).

Camponotus fastigatus Roger, 1863

Distribution: Caquetá, Huila (Fernández et al. 2019).

Camponotus femoratus (Fabricius, 1804)

Distribution: Amazonas, Caquetá, Guaviare, Meta, Putumayo, Vaupés (Fernández et al. 2019).

Camponotus indianus Forel, 1879

Distribution: Antioquia, Bolívar, Boyacá, Caquetá, Caldas, Cauca, Chocó, Cundinamarca, Huila, La Guajira, Nariño, Norte de Santander, Magdalena, Meta, Quindío, Sucre, Tolima, Valle del Cauca (Chacón de Ulloa and Abadía 2014, Fernández et al. 2019).

Camponotus latangulus Roger, 1863

Distribution: Amazonas, Caquetá, Meta (Castro et al. 2018, Fernández et al. 2019).

Camponotus leydigi Forel, 1886

Distribution: Amazonas, Caquetá, Cundinamarca, Guaviare, Huila, Meta, Nariño, Vichada, Valle del Cauca (Fernández et al. 2019).

Camponotus mus Roger, 1863

Distribution: Amazonas, Antioquia, Boyacá, Caquetá, Huila, Santander, Tolima, Valle del Cauca (Fernández et al. 2019).

Camponotus nitidior (Santschi, 1921)

Distribution: Amazonas, Antioquia, Caquetá, Chocó, Risaralda, Valle del Cauca (Castro et al. 2018, Fernández et al. 2019).

Camponotus novogranadensis Mayr, 1870

Distribution: Amazonas, Antioquia, Caquetá, Casanare, Chocó, Córdoba, Cundinamarca, Guaviare, Huila, La Guajira, Magdalena, Meta, Quindío, Tolima, Valle del Cauca, Vichada (Fernández et al. 2019).

Camponotus rapax (Fabricius, 1804)

Distribution: Amazonas, Caquetá, Guaviare, Meta (Fernández et al. 2019).

Camponotus renggeri Emery, 1894

Distribution: Amazonas, Caquetá, Cundinamarca, Huila, Meta (Fernández et al. 1996, Fernández et al. 2019).

Camponotus rufipes (Fabricius, 1775)

Distribution: Amazonas, Boyacá, Caquetá, Cundinamarca, Huila, Guaviare, Meta, Nariño, Vichada (Fernández et al. 2019).

Camponotus senex (Smith, 1858)

Distribution: Amazonas, Boyacá, Casanare, Caquetá, Cauca, Cundinamarca, Huila, Meta, Valle del Cauca (Arenas-Clavijo and Armbrecht 2019, Fernández et al. 2019).

Camponotus sericeiventris (Guérin-Méneville, 1838)

Distribution: Amazonas, Antioquia, Caquetá, Chocó, Huila, Meta, Nariño, Tolima, Valle del Cauca (Fernández et al. 2019).

Camponotus sexguttatus (Fabricius, 1793)

Distribution: Antioquia, Amazonas, Arauca, Caquetá, Huila, Magdalena, Meta, Nariño (Fernández et al. 2019).

Camponotus sphenoidalis Mayr, 1870

Distribution: Antioquia, Boyacá, Caquetá, Meta, Nariño, Quindío, Risaralda, Tolima, Valle del Cauca (Fernández et al. 2019).

Gigantiops destructor (Fabricius, 1804)

Distribution: Amazonas, Caquetá, Meta, Nariño, Tolima, Vichada (Bustos 1994, Fernández et al. 1996, Castro et al. 2018, Fernández et al. 2019).

Myrmelachista schumanni Emery, 1890

Distribution: Caquetá (Fernández et al. 2019).

Notes: New record from Caquetá

Paratrechina longicornis (Latreille, 1802)

Distribution: Amazonas, Caquetá, Casanare, Huila, Cundinamarca, Meta (Fernández et al. 1996, Fernández et al. 2019).

Acromyrmex aspersus (Smith, 1858)

Distribution: Antioquia, Bolívar, Caldas, Caquetá, La Guajira, Guaviare, Huila, Norte de Santander, Nariño, Putumayo, Quindío, Valle del Cauca (Fernández et al. 2019).

Acromyrmex coronatus (Fabricius, 1804)

Distribution: Antioquia, Caquetá, Casanare, Cundinamarca, Magdalena, Meta, Nariño, Norte de Santander, Valle del Cauca (Fernández et al. 2019).

Acromyrmex hystrix (Latreille, 1802)

Distribution: Amazonas, Boyacá, Caquetá, Cauca, Cundinamarca, Meta, Nariño, Putumayo, Valle del Cauca, Vaupés, Vichada (Fernández et al. 2019).

Acromyrmex nobilis Santschi, 1939

Distribution: Amazonas, Caquetá, Huila, Nariño, Vaupés, Vichada (Fernández et al. 2019).

Acromyrmex octospinosus (Reich, 1793)

Distribution: Amazonas, Antioquia, Atlántico, Bolívar, Boyacá, Caldas, Caquetá, Casanare, Cauca, Cesar, Chocó, Córdoba, Cundinamarca, Guainía, Guaviare, Huila, Magdalena, Nariño, Norte de Santander, Quindío, Risaralda, Santander, Tolima, Valle del Cauca, Vichada (Fernández et al. 2019).

Adelomyrmex striatus Fernández, 2003

Distribution: Amazonas, Caquetá (Fernández et al. 2019).

Notes: New record from Caquetá.

Apterostigma angustum Lattke, 1997

Distribution: Antioquia, Atlántico, Caquetá, Chocó, Sucre (Mera-Rodríguez et al. 2020).

Apterostigma auriculatum Wheeler, 1925

Distribution: Present throughout the country (Fernández et al. 2019).

Apterostigma goniodes Lattke, 1997

Distribution: Antioquia, Caquetá, Cauca, Sucre (Castro et al. 2018, Fernández et al. 2019).

Apterostigma jubatum Wheeler, 1925

Distribution: Present throughout the country (Fernández et al. 2019).

Apterostigma manni Weber, 1938

Distribution: Present throughout the country (Fernández et al. 2019).

Apterostigma megacephala Lattke, 1999

Distribution: Caquetá, Meta (Castro et al. 2018, Fernández et al. 2019).

Apterostigma peruvianum Wheeler, 1925

Distribution: Caquetá, Valle del Cauca (Mera-Rodríguez et al. 2020).

Apterostigma urichii Forel, 1893

Distribution: Present throughout the country (Fernández et al. 2019).

Atta cephalotes (Linnaeus, 1758)

Distribution: Amazonas, Antioquia, Arauca, Bolívar, Boyacá, Caldas, Caquetá, Casanare, Cauca, Cesar, Chocó, Córdoba, Cundinamarca, Guainía, Guaviare, Huila,

Magdalena, Meta, Nariño, Norte de Santander, Putumayo, Quindío, Risaralda, Santander, Tolima, Valle del Cauca, Vaupés, Vichada (Fernández et al. 2019).

Atta colombica Guérin-Méneville, 1844

Distribution: Antioquia, Boyacá, Caldas, Caquetá, Casanare, Chocó, Córdoba, Cundinamarca, Huila, La Guajira, Magdalena, Meta, Nariño, Putumayo, Quindío, Risaralda, Santander, Sucre, Tolima, Valle del Cauca, Vichada (Fernández et al. 2019).

Atta sexdens (Linnaeus, 1758)

Distribution: Amazonas, Bolívar, Boyacá, Caldas, Caquetá, Casanare, Chocó, Cundinamarca, Guainía, La Guajira, Magdalena, Meta, Santander, Tolima, Valle del Cauca, Vaupés (Fernández et al. 1996, Fernández et al. 2019).

Basiceros conjugans Brown, 1974

Distribution: Amazonas, Caquetá, Meta, Nariño (Fernández et al. 2019).

Notes: New record from Caquetá.

Basiceros disciger (Mayr, 1887)

Distribution: (Fernández et al. 2019).Caquetá, Meta

Notes: New record from Caquetá.

Basiceros scambognathus (Brown, 1949)

Distribution: Amazonas, Caquetá (Fernández et al. 2019).

Notes: New record from Caquetá.

Blepharidatta brasiliensis Wheeler, 1915

Distribution: Amazonas, Caquetá, Vaupés (Fernández et al. 2019).

Cardiocondyla nuda (Mayr, 1866)

Distribution: Amazonas, Caquetá, Cundinamarca, Huila, Meta, Santander, Valle del Cauca (Castro et al. 2018, Fernández et al. 2019).

Carebara brevipilosa Fernández, 2004

Distribution: Amazonas, Caquetá, Nariño (Castro et al. 2018, Fernández et al. 2019).

Carebara coeca Fernández, 2004

Distribution: Caquetá, Putumayo (Fernández et al. 2019).

Carebara coqueta Fernández, 2006

Distribution: Caquetá (Fernández 2006).

Carebara globularia Fernández, 2004

Distribution: Amazonas, Caquetá, Nariño (Fernández et al. 2019).

Carebara urichi (Wheeler, 1922)

Distribution: Amazonas, Caquetá, Chocó, Magdalena (Fernández et al. 2019).

Cephalotes atratus (Linnaeus, 1758)

Distribution: Amazonas, Antioquia, Atlántico, Arauca, Bolívar, Boyacá, Caldas, Caquetá, Casanare, Cauca, Cesar, Chocó, Córdoba, Cundinamarca, Guainía, Guaviare, La Guajira, Magdalena, Meta, Nariño, Norte de Santander, Putumayo, Santander, Sucre, Tolima, Vichada, Valle del Cauca, Vaupés (Fernández et al. 2019).

Cephalotes clypeatus (Fabricius, 1804)

Distribution: Amazonas, Caquetá, Casanare, Córdoba, Cundinamarca, Meta, Santander, Sucre, Valle del Cauca (Fernández et al. 2019).

Cephalotes cordatus (Smith, 1853)

Distribution: Amazonas, Caldas, Caquetá, Meta, Putumayo, Vaupés (Fernández et al. 2019).

Cephalotes grandinosus (Smith, 1860)

Distribution: Amazonas, Bolívar, Caquetá, Chocó, Cundinamarca, Huila, Magdalena, Meta, Putumayo, Tolima, Vaupés, Vichada (Fernández et al. 2019).

Cephalotes inaequalis (Mann, 1916)

Distribution: Amazonas, Caquetá, Vaupés (Fernández et al. 2019).

Cephalotes laminatus (Smith, 1860)

Distribution: Amazonas, Caquetá, Guaviare, Putumayo (Fernández et al. 2019).

Cephalotes maculatus (Smith, 1876)

Distribution: Amazonas, Antioquia, Arauca, Bolívar, Caldas, Caquetá, Casanare, Chocó, Cundinamarca, Guaviare, Huila, Magdalena, Meta, Nariño, Putumayo, Risaralda, Santander, Sucre, Tolima, Valle del Cauca, Vichada (Fernández et al. 2019).

Cephalotes manni (Kempf, 1951)

Distribution: Amazonas, Caquetá, Meta, Vaupés (Fernández et al. 2019).

Cephalotes opacus Santschi, 1920

Distribution: Amazonas, Caquetá, Guaviare, Meta, Putumayo (Fernández et al. 2019).

Cephalotes placidus (Smith, 1860)

Distribution: Amazonas, Caquetá, Guainía, Guaviare, Meta, Putumayo, Vaupés, Vichada (Fernández et al. 2019).

Cephalotes pusillus (Klug, 1824)

Distribution: Amazonas, Antioquia, Arauca, Atlántico, Bolívar, Boyacá, Caquetá, Casanare, Cesar, Córdoba, Guainía, La Guajira, Guaviare, Magdalena, Meta, Sucre (Fernández et al. 2019).

Cephalotes simillimus (Kempf, 1951)

Distribution: Amazonas, Caquetá, Putumayo, Vaupés (Fernández et al. 2019).

Cephalotes spinosus (Mayr, 1862)

Distribution: Amazonas, Caquetá, Guaviare, Meta, Putumayo, Vaupés (Fernández et al. 2019).

Cephalotes umbraculatus (Fabricius, 1804)

Distribution: Amazonas, Antioquia, Bolívar, Caquetá, Cesar, Chocó, Huila, Magdalena, Meta, Nariño, Risaralda, Tolima (Fernández et al. 2019).

Crematogaster abstinens Forel, 1899

Distribution: Amazonas, Antioquia, Caquetá, Casanare, Cundinamarca, Huila, La Guajira, Meta, Norte de Santander, Sucre, Tolima (Fernández et al. 1996, Vergara-Navarro and Serna 2013, Castro et al. 2018, Fernández et al. 2019).

Crematogaster brasiliensis Mayr, 1878

Distribution: Caquetá, Chocó, Meta (Castro et al. 2018, Fernández et al. 2019).

Crematogaster carinata Mayr, 1862

Distribution: Amazonas, Caquetá, Chocó, Huila, Magdalena, Meta, Valle del Cauca (Castro et al. 2018, Fernández et al. 2019).

Crematogaster crinosa Mayr, 1862

Distribution: Antioquia, Atlántico, Caquetá, Cesar, Cundinamarca, La Guajira, Huila, Magdalena, Meta, Norte de Santander, Santander, Tolima, VAlle del Cauca (Morgan and Mackay 2017, Castro et al. 2018, Fernández et al. 2019).

Crematogaster curvispinosa Mayr, 1862

Distribution: Antioquia, Caquetá, Cauca, Cundinamarca, Huila, Magdalena, Meta, Risaralda, Valle del Cauca (Fernández et al. 1996, Morgan and Mackay 2017, Fernández et al. 2019).

Crematogaster erecta Mayr, 1866

Distribution: Caquetá, Cesar, Chocó, Cundinamarca, Meta, Huila, Valle del Cauca (Fernández et al. 1996, Longino 2003, Castro et al. 2018, Fernández et al. 2019).

Crematogaster limata Smith, 1858

Distribution: Antioquia, Caquetá, Cundinamarca, Huila, Magdalena, Meta, Putumayo, Risaralda, Valle del Cauca (Castro et al. 2018, Fernández et al. 2019).

Crematogaster longispina Emery, 1890

Distribution: Amazonas, Caquetá, Cundinamarca (Castro et al. 2018).

Crematogaster sotobosque Longino, 2003

Distribution: Caquetá, Chocó, Risaralda, Valle del Cauca (Castro et al. 2018, Fernández et al. 2019).

Cyphomyrmex hamulatus Weber, 1938

Distribution: Antioquia, Caquetá, Sucre, Valle del Cauca (Mera-Rodríguez et al. 2020).

Cyphomyrmex kirbyi Mayr, 1887

Distribution: Caquetá, Magdalena (Fernández et al. 2019).

Cyphomyrmex laevigatus Weber, 1938

Distribution: Amazonas, Caquetá, Meta (Fernández et al. 2019).

Cyphomyrmex minutus Mayr, 1862

Distribution: Caldas, Caquetá, Cauca, La Guajira, Risaralda (Castro et al. 2018, Fernández et al. 2019).

Cyphomyrmex peltatus Kempf, 1966

Distribution: Caquetá, Huila, Putumayo, Quindío, Vichada (Castro et al. 2018, Fernández et al. 2019).

Cyphomyrmex rimosus (Spinola, 1851)

Distribution: Antioquia, Bolívar, Caquetá, Cauca, Chocó, Cundinamarca, La Guajira, Magdalena, Meta, Risaralda, Tolima, Valle del Cauca (Fernández et al. 2019).

Cyphomyrmex salvini Forel, 1899

Distribution: Caquetá, Cauca, Chocó, Magdalena, Meta, Quindío, Risaralda, Valle del Cauca (Fernández et al. 2019).

Daceton armigerum (Latreille, 1802)

Distribution: Amazonas, Caquetá, Cesar, Guainía, Guaviare, Meta, Vichada (Fernández et al. 2019).

Eurhopalothrix alopeciosa Brown & Kempf, 1960

Distribution: Present throughout the country (Fernández et al. 2019).

Hylomyrma blandiens Kempf, 1961

Distribution: Amazonas, Caquetá, Meta (Ulysséa and Brandão 2021).

Hylomyrma dandarae Ulysséa, 2021

Distribution: Caquetá, Putumayo (Ulysséa and Brandão 2021).

Hylomyrma dolichops Kempf, 1973

Distribution: Amazonas, Caquetá (Fernández et al. 1996, Fernández et al. 2019).

Hylomyrma immanis Kempf, 1973

Distribution: Amazonas, Caquetá (Castro et al. 2018, Fernández et al. 2019).

Hylomyrma sagax Kempf, 1973

Distribution: Amazonas, Caquetá (Castro et al. 2018, Fernández et al. 2019).

Hylomyrma transversa Kempf, 1973

Distribution: Caquetá, Cauca, Guaviare (Ulysséa and Brandão 2021).

Hylomyrma versuta Kempf, 1973

Distribution: Amazonas, Caquetá (Fernández et al. 1996, Fernández et al. 2019).

Kempfidris inusualis (Fernández, 2007)

Distribution: Amazonas, Caquetá (Fernández et al. 2019).

Notes: New record from Caquetá.

Lachnomyrmex pilosus (Weber, 1950)

Distribution: Caquetá, Meta, Nariño (Fernández et al. 2019).

Notes: New record from Caquetá.

Lenomyrmex inusitatus Fernández, 2001

Distribution: Caquetá, Nariño (Fernández et al. 2019).

Notes: New record from Caquetá.

Megalomyrmex drifti Kempf, 1961

Distribution: Amazonas, Caquetá, Magdalena, Meta, Putumayo (Fernández et al. 2019).

Megalomyrmex emeryi Forel, 1904

Distribution: Caquetá, Putumayo (Fernández et al. 2019).

Megalomyrmex foreli Emery, 1890

Distribution: Antioquia, Caquetá, Meta, Putumayo (Fernández et al. 2019).

Megalomyrmex incisus Smith, 1947

Distribution: Amazonas, Caquetá, Magdalena, Meta (Fernández et al. 2019).

Megalomyrmex leoninus Forel, 1885

Distribution: Boyacá, Caquetá, Guaviare, Santander, Valle del Cauca (Castro et al. 2018, Fernández et al. 2019).

Megalomyrmex megadrifti Boudinot et al., 2013

Distribution: Caquetá, Meta (Castro et al. 2018)

Megalomyrmex staudingeri Emery, 1890

Distribution: Amazonas, Caquetá (Fernández et al. 2019).

Mycetomoellerius farinosus (Emery, 1894)

Distribution: Caquetá

Notes: New record from Colombia.

Mycetomoellerius gaigei (Forel, 1914)

Distribution: Present throughout the country (Fernández et al. 2019).

Mycocepurus smithii Forel, 1893

Distribution: Amazonas, Antioquia, Caldas, Caquetá, Huila, Magdalena, Meta, Risaralda, Valle del Cauca (Castro et al. 2018, Fernández et al. 2019).

Myrmicocrypta longinoda Weber, 1938

Distribution: Amazonas, Caquetá, Putumayo (Castro et al. 2018, Fernández et al. 2019).

Myrmicocrypta spinosa Weber, 1937

Distribution: Caquetá (Fernández et al. 2019).

Myrmicocrypta urichi Weber, 1937

Distribution: Antioquia, Caquetá (Mera-Rodríguez et al. 2020).

Nesomyrmex asper (Emery, 1897)

Distribution: Caquetá, Magdalena (Castro et al. 2018, Fernández et al. 2019).

Ochetomyrmex neopolitus Fernández, 2003

Distribution: Present throughout the country (Fernández et al. 2019).

Ochetomyrmex semipolitus Mayr, 1878

Distribution: Present throughout the country (Fernández et al. 2019).

Octostruma balzani (Emery, 1894)

Distribution: Amazonas, Antioquia, Bolívar, Caquetá, Chocó, Cundinamarca, Guaviare, Magdalena, Meta, Quindío, Risaralda, Tolima, Valle del Cauca (Fernández et al. 2019).

Octostruma impressa Palacio, 1997

Distribution: Antioquia, Caquetá, Risaralda, Magdalena, Valle del Cauca (Castro et al. 2018, Fernández et al. 2019).

Octostruma rugifera (Mayr, 1887)

Distribution: Present throughout the country (Fernández et al. 2019).

Oxyepoecus ephippiatus Albuquerque & Brandão, 2004

Distribution: Caquetá

Notes: New record from Colombia.

Paratrachymyrmex diversus (Mann, 1916)

Distribution: Caquetá (Mera-Rodríguez et al. 2020).

Pheidole arachnion Wilson, 2003

Distribution: Caquetá (Guerrero et al. 2022)

Pheidole gertrudae Forel, 1886

Distribution: Amazonas, Caquetá (Castro et al. 2018, Fernández et al. 2019).

Pogonomyrmex naegelii Emery, 1878

Distribution: Amazonas, Caquetá, Meta (Fernández et al. 1996, Fernández et al. 2019).

Procryptocerus convexus Forel, 1904

Distribution: Caquetá (Fernández et al. 2019).

Procryptocerus scabriusculus Forel, 1899

Distribution: Antioquia, Caquetá, Caldas, Cundinamarca, Quindío, Risaralda (Castro et al. 2018, Fernández et al. 2019).

Procryptocerus schmitti Forel, 1901

Distribution: Caquetá (Fernández et al. 2019).

Procryptocerus spiniperdus Forel, 1899

Distribution: Caquetá, Vaupés (Fernández et al. 2019).

Sericomyrmex amabilis Wheeler, 1925

Distribution: Amazonas, Antioquia, Caquetá, Cauca, Chocó, Cundinamarca, Magdalena, Tolima, Risaralda, Valle del Cauca (Mera-Rodríguez et al. 2020).

Sericomyrmex bondari Borgmeier, 1937

Distribution: Amazonas, Caquetá, Meta, Putumayo, Vaupés, Vichada (Fernández et al. 2019).

Sericomyrmex mayri Forel, 1912

Distribution: Amazonas, Caquetá, Meta, Putumayo, Vaupés, Vichada (Fernández et al. 2019).

Sericomyrmex parvulus Forel, 1912

Distribution: Amazonas, Caquetá (Fernández et al. 2019).

Solenopsis geminata (Fabricius, 1804)

Distribution: Antioquia, Bolívar, Caquetá, Chocó, La Guajira, Santander, Risaralda, Valle del Cauca (Castro et al. 2018, Fernández et al. 2019).

Stegomyrmex manni Smith, 1946

Distribution: Antioquia, Bolivar, Caquetá, Sucre (Fernández et al. 2019, Camargo-Vanegas et al. 2024).

Notes: New record from Caquetá.

Strumigenys cassicuspis (Bolton, 2000)

Distribution: Caquetá (Fernández et al. 2019).

Strumigenys cordovensis Mayr, 1887

Distribution: Arauca, Caquetá, Cundinamarca, Magdalena, Meta, Valle del Cauca (Fernández et al. 2019).

Strumigenys decipula (Bolton, 2000)

Distribution: Boyacá, Caquetá (Fernández et al. 2019).

Strumigenys denticulata Mayr, 1887

Distribution: Amazonas, Antioquia, Arauca, Caldas, Caquetá, Cauca, Cundinamarca, La Guajira, Magdalena, Meta, Nariño, Putumayo, Sucre, Valle del Cauca, Vaupés, Vichada (Fernández et al. 2019).

Strumigenys enopla (Bolton, 2000)

Distribution: Boyacá, Caquetá, Cauca, Huila, Magdalena, Nariño, Norte de Santander, Santander (Fernández et al. 2019).

Strumigenys fridericimuelleri Forel, 1886

Distribution: Caquetá (Fernández et al. 2019).

Strumigenys gundlachi (Roger, 1862)

Distribution: Antioquia, Caldas, Caquetá, Cauca, Chocó, Cundinamarca, Huila, Magdalena, Meta, Nariño, Norte de Santander, Putumayo, Quindío, Risaralda, Santander, Tolima, Valle del Cauca (Fernández et al. 2019).

Strumigenys incuba Bolton, 2000

Distribution: Caquetá, Cauca, Putumayo (Fernández et al. 2019).

Notes: New record from Caquetá.

Strumigenys interfectiva Lattke & Goitía, 1997

Distribution: Antioquia, Caquetá, Nariño (Castro et al. 2018, Fernández et al. 2019).

Strumigenys nubila Lattke & Goitía, 1997

Distribution: Caquetá, Caldas, Quindío, Risaralda, Valle del Cauca (Fernández et al. 2019).

Strumigenys precava Brown, 1954

Distribution: Amazonas, Caquetá, Cundinamarca, Meta, Putumayo (Fernández et al. 2019).

Strumigenys prospiciens Emery, 1906

Distribution: Caquetá

Notes: New record from Colombia.

Strumigenys raptans (Bolton, 2000)

Distribution: Caldas, Caquetá, Cundinamarca, Huila, Meta, Nariño, Quindío, Risaralda, Santander, Sucre, Valle del Cauca, Vichada (Fernández et al. 2019).

Strumigenys trinidadensis Wheeler, 1922

Distribution: Caquetá, Guaviare, Nariño, Quindío, Vaupés, Valle del Cauca (Fernández et al. 2019).

Strumigenys trudifera Kempf & Brown, 1969

Distribution: Amazonas, Caquetá, Putumayo, Nariño, Meta, Vaupés (Fernández et al. 2019).

Strumigenys zeteki (Brown, 1959)

Distribution: Amazonas, Caldas, Caquetá, Cauca, Cundinamarca, Chocó, Magdalena, Nariño, Quindío, Santander, Tolima, Valle del Cauca (Fernández et al. 2019).

Talaridris mandibularis Weber, 1941

Distribution: Caquetá (García et al. 2020).

Tranopelta gilva Mayr, 1866

Distribution: Antioquia, Caldas, Caquetá, Cauca, Chocó, La Guajira, Magdalena, Nariño, Tolima, Valle del Cauca (Fernández et al. 1996, Fernández 2003b, Castro et al. 2018, Fernández et al. 2019).

Wasmannia auropunctata (Roger, 1863)

Distribution: Amazonas, Antioquia, Bolívar, Caldas, Caquetá, Cauca, Cesar, Chocó, Cundinamarca, Huila, La Guajira, Magdalena, Meta, Putumayo, Risaralda, Tolima, Valle del Cauca (Castro et al. 2018, Fernández et al. 2019).

Paraponera clavata (Fabricius, 1775)

Distribution: Amazonas, Antioquia, Caldas, Caquetá, Casanare, Cauca, Chocó, Cundinamarca, Meta, Nariño, Putumayo, Vaupés, Valle del Cauca (Fernández et al. 2019).

Anochetus bispinosus (Smith, 1858)

Distribution: Amazonas, Caquetá, Guaviare, Magdalena, Meta, Nariño, Putumayo, Valle del Cauca, Vaupés (Fernández et al. 2019).

Anochetus diegensis Forel, 1912

Distribution: Antioquia, Bolívar, Caquetá, La Guajira, Magdalena, Meta, Valle del Cauca (Castro et al. 2018, Fernández et al. 2019).

Anochetus emarginatus (Fabricius, 1804)

Distribution: Amazonas, Bolívar, Caquetá, Chocó, La Guajira, Magdalena, Meta, Nariño, Putumayo, Valle del Cauca, Vichada (Fernández et al. 2019).

Anochetus horridus Kempf, 1964

Distribution: Amazonas, Caquetá, Valle del Cauca (Lozano-Zambrano et al. 2008, Fernández et al. 2019).

Anochetus inermis André, 1889

Distribution: Amazonas, Caquetá, Meta, Putumayo, Risaralda, Valle del Cauca (Fernández et al. 2019).

Anochetus mayri Emery, 1884

Distribution: Amazonas, Caquetá, Meta, Putumayo, Risaralda, Valle del Cauca (Fernández et al. 2019).

Centromyrmex alfaroi Emery, 1890

Distribution: Caquetá (Fernández et al. 2019).

Centromyrmex brachycola (Roger, 1861)

Distribution: Amazonas, Caquetá, Meta (Fernández et al. 2019).

Centromyrmex gigas Forel, 1911

Distribution: Caquetá

Notes: New record for Colombia.

Dinoponera longipes Emery, 1901

Distribution: Amazonas, Caquetá (Dias and Lattke 2021).

Hypoponera distinguenda (Emery, 1890)

Distribution: Amazonas, Caquetá, Cundinamarca, La Guajira, Magdalena, Meta, Putumayo, Valle del Cauca (Castro et al. 2018, Fernández et al. 2019).

Leptogenys amazonica Borgmeier, 1930

Distribution: Caquetá (Sanabria-Blandón and Chacón de Ulloa 2012, Fernández et al. 2019).

Leptogenys amu Lattke, 2011

Distribution: Caquetá (Fernández et al. 2019).

Leptogenys gaigei Wheeler, 1923

Distribution: Amazonas, Nariño, Caquetá (Fernández et al. 2019).

Leptogenys langi Wheeler, 1923

Distribution: Caquetá, Nariño (Fernández et al. 2019).

Leptogenys linearis (Smith, 1858)

Distribution: Amazonas, Caquetá (Fernández et al. 2019).

Leptogenys phylloba Lattke, 2011

Distribution: Amazonas, Caquetá (Fernández et al. 2019).

Leptogenys ritae Forel, 1899

Distribution: Bolívar, Caquetá, Magdalena, Nariño, Santander, Tolima, Vaupés (Fernández et al. 2019).

Leptogenys unistimulosa Roger, 1863

Distribution: Caquetá, Cundinamarca, Meta (Fernández et al. 2019).

Notes: New record from Caquetá.

Mayaponera arhuaca (Forel, 1901)

Distribution: Amazonas, Bolívar, Cauca, Caquetá, Cundinamarca, Guaviare, Magdalena, Nariño, Putumayo, Valle del Cauca (Fernández et al. 2019).

Mayaponera becculata (MacKay & MacKay, 2010)

Distribution: Caquetá, Magdalena (Castro et al. 2018, Fernández et al. 2019).

Mayaponera constricta (Mayr, 1884)

Distribution: Amazonas, Antioquia, Bolívar, Boyacá, Caldas, Caquetá, Cesar, Chocó, Huila, Magdalena, Meta, Nariño, Putumayo, Quindío, Risaralda, Valle del Cauca, Vaupés, Vichada (Fernández et al. 2019).

Neoponera apicalis (Latreille, 1802)

Distribution: Amazonas, Antioquia, Bolívar, Caquetá, Casanare, Cesar, Chocó, La Guajira, Magdalena, Meta, Norte de Santander, Valle del Cauca, Vaupés (Fernández et al. 1996, Fernández et al. 2019).

Neoponera carbonaria (Smith, 1858)

Distribution: Antioquia, Boyacá, Caldas, Caquetá, Cauca, Cundinamarca, Huila, Nariño, Putumayo, Risaralda, Valle del Cauca (Fernández et al. 2019).

Neoponera carinulata (Roger, 1861)

Distribution: Amazonas, Antioquia, Atlántico, Caquetá, Cauca, Chocó, Guainía, Guaviare, Huila, Nariño, Risaralda, Valle del Cauca, Vaupés (Fernández et al. 2019).

Neoponera commutata (Roger, 1860)

Distribution: Amazonas, Caquetá, Cauca, Guaviare, Meta, Nariño, Putumayo, Vichada (Fernández et al. 2019).

Neoponera crenata (Roger, 1861)

Distribution: Amazonas, Boyacá, Caldas, Caquetá, Cauca, Chocó, Huila, Meta, Putumayo, Quindío, Risaralda, Sucre, Valle del Cauca, Vaupés (Fernández et al. 2019).

Neoponera fauveli (Emery, 1895)

Distribution: Antioquia, Caquetá, Cauca, Chocó, Magdalena, Nariño, Risaralda, Valle del Cauca (Fernández et al. 2019).

Neoponera foetida (Linnaeus, 1758)

Distribution: Amazonas, Antioquia, Caquetá, Cauca, Meta, Valle del Cauca (Fernández et al. 2019).

Neoponera laevigata (Smith, 1858)

Distribution: Amazonas, Caquetá, Chocó, Cundinamarca, Putumayo, Valle del Cauca (Fernández et al. 2019).

Neoponera obscuricornis (Emery, 1890)

Distribution: Amazonas, Antioquia, Caquetá, Chocó, Meta, Valle del Cauca, Vichada (Fernández et al. 1996, Fernández et al. 2019).

Neoponera rostrata (Emery, 1890)

Distribution: Amazonas, Caquetá (Fernández et al. 2019).

Neoponera striatinodis (Emery, 1890)

Distribution: Antioquia, Caquetá, Cauca, Chocó, Meta, Putumayo, Valle del Cauca (Chacón de Ulloa et al. 2012, Fernández et al. 2019).

Neoponera unidentata (Mayr, l862)

Distribution: Amazonas, Caquetá, Cauca, Cundinamarca, Guaviare, Huila, Magdalena, Meta, Nariño, Norte de Santander, Putumayo, Quindío, Risaralda, Valle del Cauca (Fernández et al. 2019).

Neoponera verenae (Forel, 1922)

Distribution: Amazonas, Antioquia, Bolívar, Boyacá, Caquetá, Casanare, Cauca, Chocó, Guaviare, Huila, Magdalena, Meta, Nariño, Putumayo, Risaralda, Valle del Cauca (Fernández et al. 2019).

Neoponera villosa (Fabricius, 1804)

Distribution: Amazonas, Antioquia, Atlántico, Bolívar, Boyacá, Casanare, Caquetá, Cauca, Chocó, Cundinamarca, Guaviare, Magdalena, Meta, Nariño, Putumayo, Risaralda, Santander, Vaupés, Vichada, Valle del Cauca (Fernández et al. 2019).

Odontomachus bauri Emery, 1892

Distribution: Caquetá, Meta, Nariño, Putumayo, Quindío, Tolima, Valle del Cauca, Vichada (Castro et al. 2018).

Odontomachus bradleyi Brown, 1976

Distribution: Boyacá, Caquetá, Cauca, Nariño, Norte de Santander (Fernández et al. 2019).

Odontomachus brunneus (Patton, 1894)

Distribution: Amazonas, Bolívar, Caquetá, Casanare, Magdalena, Meta, Putumayo, Santander, Vaupés (Fernández et al. 2019).

Odontomachus chelifer (Latreille, 1802)

Distribution: Antioquia, Bolívar, Boyacá, Caquetá, Casanare, Cesar, Huila, Magdalena, Meta, Norte de Santander, Quindío, Risaralda, Santander, Sucre, Valle del Cauca (Fernández et al. 2019).

Odontomachus haematodus (Linnaeus, 1758)

Distribution: Amazonas, Antioquia, Bolívar, Boyacá, Caquetá, Cauca, Córdoba, Chocó, Guaviare, Magdalena, Meta, Norte de Santander, Putumayo, Vaupés (Fernández et al. 2019).

Odontomachus hastatus (Fabricius, 1804)

Distribution: Amazonas, Caquetá, Cauca, Meta, Nariño, Putumayo, Valle del Cauca, Vaupés (Fernández et al. 1996, Fernández et al. 2019).

Odontomachus laticeps Roger, 1861

Distribution: Caquetá, Cundinamarca (Lozano-Zambrano et al. 2008, Fernández et al. 2019)

Odontomachus meinerti Forel, 1905

Distribution: Amazonas, Boyacá, Caquetá, Chocó, Meta, Nariño, Norte de Santander, Putumayo, Valle del Cauca, Vaupés, Vichada (Fernández et al. 2019).

Odontomachus opaciventris Forel, 1899

Distribution: Caquetá, Cundinamarca, Nariño, Tolima, Santander, Valle del Cauca (Castro et al. 2018, Fernández et al. 2019).

Odontomachus panamensis Forel, 1899

Distribution: Caquetá, Nariño (Fernández et al. 2019).

Odontomachus scalptus Brown, 1978

Distribution: Amazonas, Caquetá, Cundinamarca (Castro et al. 2018, Fernández et al. 2019).

Odontomachus yucatecus Brown, 1976

Distribution: Caquetá, Nariño (Fernández et al. 2019).

Pachycondyla crassinoda (Latreille, 1802)

Distribution: Amazonas, Antioquia, Arauca, Boyacá, Caquetá, Casanare, Cauca, Chocó, Cundinamarca, Guaviare, Meta, Nariño, Putumayo, Santander, Valle del Cauca, Vaupés, Vichada (Fernández et al. 2019).

Pachycondyla harpax (Fabricius, 1804)

Distribution: Amazonas, Antioquia, Atlántico, Bolívar, Boyacá, Caldas, Caquetá, Cauca, Chocó, Cundinamarca, Guaviare, Huila, La Guajira, Magdalena, Meta, Nariño, Norte de Santander, Sucre, Valle del Cauca, Magdalena, Putumayo, Risaralda, Santander, Tolima, Vaupés, Vichada (Fernández et al. 2019).

Pachycondyla impressa (Roger, 1861)

Distribution: Amazonas, Antioquia, Atlántico, Bolívar, Boyacá, Caldas, Caquetá, Cauca, Chocó, Huila, Magdalena, Meta, Nariño, Norte de Santander, Putumayo, Quindío, Risaralda, Santander, Tolima, Valle del Cauca (Fernández et al. 2019).

Platythyrea punctata (Smith, 1858)

Distribution: Amazonas, Bolívar, Caquetá, Meta (Fernández et al. 1996, Fernández et al. 2019).

Pseudoponera stigma (Fabricius, 1804)

Distribution: Amazonas, Antioquia, Bolívar, Boyacá, Nariño, Caquetá, Cauca, Chocó, Guaviare, Huila, Magdalena, Meta, Norte de Santander, Putumayo, Quindío, Risaralda, Tolima, Valle del Cauca, Vaupés, Vichada (Fernández et al. 2019).

Rasopone ferruginea (Smith, 1858)

Distribution: Amazonas, Antioquia, Caldas, Caquetá, Cauca, Magdalena, Nariño, Norte de Santander, Putumayo, Quindío, Risaralda, Valle del Cauca (Fernández et al. 2019).

Simopelta fernandezi Mackay & Mackay, 2008

Distribution: Antioquia, Caquetá (Vergara-Navarro and Serna 2013, Fernández et al. 2019).

Thaumatomyrmex atrox Weber, 1939

Distribution: Amazonas, Atlántico, Bolívar, Caquetá, Cundinamarca, Magdalena, Sucre, Valle del Cauca (Fernández et al. 2019).

Notes: New record from Caquetá.

Wadeura guianensis Weber, 1939

Distribution: Amazonas, Caquetá, Cauca, La Guajira, Meta (Castro et al. 2018, Fernández et al. 2019).

Wadeura holmgreni (Wheeler, 1925)

Distribution: Antioquia, Caquetá, Meta (Vergara-Navarro and Serna 2013, Castro et al. 2018, Branstetter and Longino 2022)

Wadeura holmgrenita Branstetter & Longino, 2022

Distribution: Caquetá

Notes: New record from Colombia.

Wadeura pauli (Fernandes & Delabie, 2019)

Distribution: Caquetá

Notes: New record from Colombia.

Discothyrea neotropica Bruch, 1919

Distribution: Caquetá, Bolívar, Magdalena (Fernández et al. 2019).

Discothyrea denticulata Weber, 1939

Distribution: Amazonas, Caquetá, Cauca, Nariño, Norte de Santander, Putumayo, Valle del Cauca (Fernández et al. 2019).

Discothyrea horni Menozzi, 1927

Distribution: Bolívar, Caldas, Caquetá, Quindío, Risaralda, Valle del Cauca (Chacón de Ulloa et al. 2012, Fernández et al. 2019).

Discothyrea humilis Weber, 1939

Distribution: Amazonas, Caquetá (Fernández et al. 2019).

Discothyrea sexarticulata Borgmeier, 1954

Distribution: Amazonas, Caquetá, Magdalena, Risaralda (Fernández et al. 2019).

Probolomyrmex kelleri Oliveira & Feitosa, 2019

Distribution: Caquetá

Notes: New record from Colombia.

Proceratium mancum Mann, 1922

Distribution: Antioquia, Caquetá, Quindío (Fernández et al. 2019).

Proceratium transitionis de Andrade, 2003

Distribution: Caquetá, Santander (Castro et al. 2018, Fernández et al. 2019).

Pseudomyrmex atripes (Smith, 1860)

Distribution: Caquetá, Chocó, Cundinamarca, Magdalena, Meta (Fernández et al. 1996, Fernández et al. 2019).

Pseudomyrmex boopis (Roger, 1863)

Distribution: Antioquia, Bolívar, Caquetá, Casanare, Cauca, Chocó, La Guajira, Magdalena, Meta, Nariño, Putumayo, Risaralda, Santander, Sucre, Tolima, Valle del Cauca (Fernández et al. 2019).

Pseudomyrmex cubaensis (Forel, 1901)

Distribution: Amazonas, Antioquia, Caquetá, Cauca, Magdalena, Meta (Fernández et al. 2019).

Pseudomyrmex dendroicus (Forel, 1904)

Distribution: Antioquia, Arauca, Boyacá, Caquetá, Casanare, Cundinamarca, Meta, Putumayo (Fernández et al. 2019).

Pseudomyrmex depressus (Forel, 1906)

Distribution: Antioquia, Caquetá, Magdalena (Fernández et al. 2019).

Pseudomyrmex elongatus (Mayr, 1870)

Distribution: Amazonas, Antioquia, Bolívar, Caldas, Caquetá, Casanare, Cauca, Cesar, Chocó, Cundinamarca, Huila, La Guajira, Magdalena, Meta, Santander, Sucre, Valle del Cauca (Fernández et al. 2019).

Pseudomyrmex filiformis (Fabricius, 1804)

Distribution: Antioquia, Caquetá, Chocó, Cundinamarca, Huila, La Guajira, Magdalena, Meta, Risaralda, Santander, Sucre, Tolima, Valle del Cauca (Fernández et al. 2019).

Pseudomyrmex flavidulus (Smith, 1858)

Distribution: Amazonas, Bolívar, Caquetá, Cundinamarca, Meta (Fernández et al. 1996, Fernández et al. 2019).

Pseudomyrmex godmani (Forel, 1899)

Distribution: Caquetá (Fernández et al. 2019).

Pseudomyrmex gracilis (Fabricius, 1804)

Distribution: Present throughout the country (Fernández et al. 2019).

Pseudomyrmex maculatus (Smith, 1855)

Distribution: Caquetá, Casanare (Fernández et al. 2019).

Pseudomyrmex oculatus (Smith, 1855)

Distribution: Amazonas, Antioquia, Arauca, Caquetá, Chocó, Cundinamarca, Magdalena, Meta, Santander, Tolima, Valle del Cauca, Vaupés, Vichada (Fernández et al. 2019).

Pseudomyrmex pallens (Mayr, 1870)

Distribution: Antioquia, Caquetá, Cundinamarca, Huila, La Guajira, Magdalena, Meta, Quindío, Risaralda, Valle del Cauca (Fernández et al. 2019).

Pseudomyrmex perboscii (Guérin-Méneville, 1844)

Distribution: Amazonas, Bolívar, Caquetá, Cundinamarca, Huila, Magdalena, Meta (Fernández et al. 1996, Fernández et al. 2019).

Pseudomyrmex rubiginosus (Stitz, 1913)

Distribution: Amazonas, Caquetá (Fernández et al. 1996, Fernández et al. 2019).

Pseudomyrmex spiculus Ward, 1989

Distribution: Amazonas, Caquetá, Chocó, Magdalena (Fernández et al. 2019).

Pseudomyrmex tenuis (Fabricius, 1804)

Distribution: Amazonas, Antioquia, Caquetá, Chocó, Cundinamarca, Meta, Putumayo, Vaupés (Fernández et al. 2019).

Pseudomyrmex tenuissimus (Emery, 1906)

Distribution: Antioquia, Caquetá, Cundinamarca, Huila, Magdalena, Meta, San Andrés y Providencia, Santander, Sucre, Valle del Cauca (Fernández et al. 2019).

Pseudomyrmex terminalis (Smith, 1877)

Distribution: Amazonas, Caquetá (Fernández et al. 1996, Fernández et al. 2019).

Pseudomyrmex termitarius (Smith, 1855)

Distribution: Amazonas, Antioquia, Caquetá, Casanare, Cauca, Cesar, Córdoba, Cundinamarca, Guainía, Huila, La Guajira, Magdalena, Meta, Nariño, Norte de Santander, Putumayo, Santander, Sucre, Tolima, Valle del Cauca, Vichada (Fernández et al. 2019).

Discussion

All the ants recorded here come from the Andean-Amazonian transition zone located in the Department of Caquetá. Soil sampling in this transition zone using both TSBF and Winkler sacs methods allowed us to collect seven species of ants previously unknown for Colombia and 14 species with no previous records for the Department of Caquetá. These ant species are distributed in five subfamilies and 16 genera, as follows: Myrmicinae (12 species), Ponerinae (5), Dolichoderinae (2), Formicinae (1) and Proceratiinae (1). For Caquetá, approximately 75% of the genera (82) and 26% of the species (322) known in Colombia are recorded. Our data combined with others (Castro et al. 2018, Castro et al. 2023) obtained within the AATZ suggest that this region presents a relatively unique ant fauna, that is, a high turnover of species (% similarity in parentheses) compared to Departments located in relatively close biogeographic regions, such as Amazonas (53%, Amazon Region), Meta (48%, Orinoquía Region) and Huila (21% Andean Region). The similarity of ants from Caquetá is also low compared to that of those Departments with a relatively known fauna, for example, Valle del Cauca (43%), Antioquia (35%) and Magdalena (30%). The pattern of replacement or dissimilarity between the ant fauna of Caquetá and other regions of Colombia suggests that AATZ could be playing a fundamental role in the establishment of Andean and Amazonian ant communities that take advantage of the diversity of microhabitats for the establishment of their colonies, promoting the co-existence of a high diversity of ant species (Longino and Colwell 1997), as well as some biogeographically remarkable taxa in this transition zone.

Soil and subsoil ants have been one of the least represented groups in edaphic diversity inventories (Wong and Guénard 2021), which has led to large gaps in information on the distribution of the species that are part of these communities. The application of the TSBF method to sample ants in AATZ made it possible to fill part of these gaps, since genera such as *Stegomyrmex* and *Oxypoecus* are recorded for the first time for the Colombian Amazon Region. *Stegomyrmex manni* is the only species of the genus recorded in Colombia with populations showing a cis-Andean distribution; the record here from AATZ (trans-Andean distribution), however, suggests that the populations of this species have a wider distribution ranging from Andean forests (Serna 2002), dry forest (Camargo-Vanegas et al. 2024) to Ecuadorian Amazonian rainforest (Ryder et al. 2007). On the other hand, although the genus *Oxyepoecus* has been previously recorded for Colombia (Fernández et al. 2019), *Oxyepoecus ephippiatus* is recorded for the first time in Colombia. The discovery of *O. ephippiatus* in the Colombian Amazon is expected considering its previous record in the Brazilian and Ecuadorian Amazon rainforest (Ryder et al. 2010b).

The application of the TSBF method to sample ants living on the ground not only allows us to complement the inventories and distributions of ant species, but this technique becomes important to increase the understanding of the biology of the species that can be collected on the monoliths. We provide information for five species of ants recorded for the first time living inside the soil. *Stegomyrmex manni* is a common soil inhabitant and is collected infrequently using Winkler bags; however, this is the first record of the species showing hypogeic habits. The *Strumigenys prospiciens* queen collected 0 to 10 cm deep in the soil suggests a hypogeic lifestyle. For *Centromyrmex gigas*, there are few natural history details, but the hypogeic style recorded here could be a strategy to find termite mounds on which they feed, as suggested by Delabie et al. (2000). All specimens of the two *Wadeura* species recorded here were collected 20 cm deep within the soil. The few known records of *Wadeura holmgrenita* come from variable habitats (Branstetter and Longino 2022), but our data suggest that it is an abundant species in the cloud forest of the Andean-Amazonian transition zone. On the other hand, *Wadeura pauli* appears to be a species restricted to the Amazon (Brazil, Colombia and Guyana), but with few records probably due to its hypogeic habits (Fernandes and Delabie 2019); like the type series of the species, the three specimens collected here also come from interior soil, contrasting with a single record from Guyana extracted from sifted leaf-litter (Fernandes and Delabie 2019).

Biodiversity research in Caquetá has been limited due to social problems arising from the armed conflict. This has created a gap in knowledge of its biodiversity, making it difficult to understand and conserve local ecosystems. However, the peace agreements in Colombia (2016), have opened the possibility of sampling in areas that were previously in armed conflict, this having a positive effect on myrmecological studies in the country (Guerrero et al. 2018, García et al. 2020). New species records for the country and the distribution expansion of other species offered here provide insight into the diversity of ants in little explored areas, adding information that complements the inventory of ant diversity in Colombia. On the latter, no updated information on ant species richness is available, other than that of García et al. (2020). Based on the records presented here and recent taxonomic work of genera for the Neotropical Region including specimens from Colombia (Ortiz-Sepuvelda et al. 2019, Camargo-Vanegas and Guerrero 2020, Ladino and Feitosa 2020, Mera-Rodríguez et al. 2020, Sozanski et al. 2020, Dias and Lattke 2021, Longino and Branstetter 2021, Ulysséa and Brandão 2021, Branstetter and Longino 2022, Fiorentino et al. 2022, Guerrero et al. 2022, Sanabria-Blandón and Achury 2022, Troya and Lattke 2022, Fernández et al. 2023, França et al. 2024, Guerrero et al. 2024, Arredondo and Guerrero 2025), we provide an update on ant richness in Colombia. In this sense, the current number of species in Colombia is 1280 and 110 genera, which corresponds to 41% of the species and nearly 80% of the genera from Neotropical Region (Fernández et al. 2021).

Finally, the records in this study can serve as a primary resource for the development of research that aims to understand the effect of natural barriers such as mountain ranges limiting the dispersal of species, as well as on the evolution of ants that inhabit areas within the ground.

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Author contributions

BSAH: Conceptualisation, writing-original draft, Ant identification; YACG: Taking high resolution photos, writing-original draft; YGV: Data curation, EHDB: Supervision, Funding acquisition, Review and editing; JGT: Supervision, Funding acquisition, Writing-review; RJG: Conceptualisation, Writing-review and editing. All authors actively took part in the discussion of the results, they reviewed and approved the definitive version of the paper.

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